



# **FINANSE i PRAWO FINANSOWE**

---

## **JOURNAL of FINANCE and FINANCIAL LAW**

---

**ISSN 2353-5601**

**vol. 4(36)**

**GRUDZIEŃ/DECEMBER 2022**

**KWARTALNIK**



**WYDZIAŁ EKONOMICZNO-  
SOCJOLOGICZNY**  
Uniwersytet Łódzki



**UNIWERSYTET  
ŁÓDZKI**



**FINANSE i PRAWO  
FINANSOWE**

---

**JOURNAL of FINANCE  
and FINANCIAL LAW**

---

**ISSN 2353-5601**

**vol. 4(36)**

**GRUDZIEŃ/DECEMBER 2022**

**K W A R T A L N I K**

## Rada Naukowa

Femi Ayoola (University of Ibadan, Nigeria)  
Djula Borozan (University of Osijek, Chorwacja)  
Zbysław Dobrowolski (Uniwersytet Jagielloński, Polska)  
Teresa Famulska (Uniwersytet Ekonomiczny w Katowicach, Polska)  
Stanisław Flejterski (Uniwersytet Szczeciński, Polska)  
Jerzy Gajdka (Uniwersytet Łódzki, Polska)  
Grzegorz Gołębiowski (Wyższa Szkoła Finansów i Zarządzania w Warszawie, Polska)  
Iryna Hryhoruk (Vasyl Stefanyk Precarpathian National University, Ivano-Frankiv's'k, Ukraina)  
Ireneusz Jaźwiński (Uniwersytet Szczeciński, Polska)  
Sami Kajalo (Aalto University, Finlandia)  
Stanisław Kasiewicz (Szkoła Główna Handlowa w Warszawie: SGH, Polska)  
Zbigniew Kmieciak (Uniwersytet Łódzki, Polska)  
Sophia Lobozynska (Ivan Franko L'viv National University of Lviv, Ukraina)  
Maciej Malaczewski (Uniwersytet Łódzki, Polska)  
Elena Manas (University of Alcalá de Henares, Hiszpania)  
Daniel Meyer (College of Business and Economics in Johannesburg, RPA)  
María del Carmen Montero Bancalero (Universidad de Sevilla)  
Paulo Reis Mourao (University of Minho, Braga, Portugalia)  
Abdelhamid Nechad (ENCG Tangier, Maroko)

Dijana Oreski (University of Zagreb, Hiszpania)  
Witold Orłowski (Uniwersytet Łódzki, Akademia Finansów i Biznesu Vistula, Polska)  
Fazilah Mohd Razali (University Putra Malaysia, Selangor, Malezja)  
Humberto Nuno Rito Ribeiro (University of Aveiro, Portugalia)  
María Dolores Alcaide Ruiz (University of Seville)  
Ramona Rupeika-Apoga (University of Latvia, Ryga, Łotwa)  
Edyta Rutkowska-Tomaszewska (Uniwersytet Wrocławski, Polska)  
Carmen Sanchez (Universidade de Santiago de Compostela, Hiszpania)  
Wolfgang Scherf (Justus Liebig University, Giessen, Niemcy)  
Francisco Serrano Domínguez (Universidad de Sevilla, Hiszpania)  
Iryna Skomorowycz (Ivan Franko National University of Lviv, Ukraina)  
Magdalena Maria Stuss (Uniwersytet Jagielloński, Polska)  
Anna Tarabas (SP Jain School of Global Management, Dubai, Zjednoczone Emiraty Arabskie)  
Mahmut Tekce (Uniwersytet Marmara, Turcja)  
Fátima Teresa Sol Murta (University of Coimbra, Portugalia)  
Jacek Tomkiewicz (Akademia Leona Koźmińskiego, Warszawa, Polska)  
Harry W. Trummer (Goethe University, Frankfurt, Niemcy)  
Ulyana Vladychyn (Ivan Franko National University of Lviv, Ukraina)

## Zespół Redakcyjny

### Redaktor Naczelny

Iwona Dorota Czechowska (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)  
Paulo Reis Mourao (University of Minho, Braga, Portugalia)

### Zastępca Redaktora Naczelnego

Dagmara Hajdys (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)  
Ramona Rupeika-Apoga (University of Latvia, Ryga, Łotwa)

### Redaktor Tematyczny: Finanse

Monika Marcinkowska (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)  
Sophia Lobozynska (Ivan Franko L'viv National University of Lviv, Ukraina)

### Redaktor Tematyczny: Prawo Finansowe

Edyta Rutkowska-Tomaszewska (Uniwersytet Wrocławski, Wydział Prawa, Administracji i Ekonomii)  
Anna Mlostko-Olszewska (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)

### Redaktor Tematyczny: Zarządzanie finansami przedsiębiorstw i rynek kapitałowy

Monika Bolek (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)

### Redaktor Tematyczny: Rozwój gospodarczy

Abdelhamid Nechad (ENCG Tangier, Maroko)

### Redaktor Tematyczny: Technologia i zarządzanie

Humberto Nuno Rito Ribeiro (University of Aveiro, Portugalia)

### Redaktor Języka Angielskiego

Katarzyna Walińska (Uniwersytet Łódzki, Studium Języków Obcych)

### Redaktor Statystyczny

Wojciech Zatoń (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)  
Łukasz Ziarko (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Statystyki i Demografii)

### Redaktor ds. Organizacyjno-Prawnych

Agnieszka Czajkowska (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)  
Tomasz Florczak (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)

### Redaktor Naukowy

Joanna Stawska (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)  
Magdalena Ślebocka (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)  
Fátima Teresa Sol Murta (University of Coimbra, Portugalia)

### Redaktor ds. międzynarodowienia czasopisma

Małgorzata Jabłońska (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)  
Robert W. McGee (Fayetteville State University)  
Mahmut Tekce (Uniwersytet Marmara, Istanbul)

### Sekretariat Redakcji

Małgorzata Jędraszczak (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)

### Redaktor Techniczny

Monika Wolska-Bryl (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny)

### Obsługa strony IT

Jacek Sikorski (Absolwent Uniwersytetu Łódzkiego, Wydział Ekonomiczno-Socjologiczny)  
Dariusz Jędrzejka (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)

### Stała współpraca:

Lena Grzesiak (Uniwersytet Łódzki, Wydział Zarządzania)  
Marta Padaszyska (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)  
Radosław Witczak (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)  
Wojciech Zatoń (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)  
Artur Zimny (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny, Instytut Finansów)  
Studenckie Koło Naukowe Analiz i Prognozowania Gospodarczego 4Future (Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny)

**Wszystkie artykuły publikowane w czasopiśmie przeszły podwójną – ślepą recenzję.**

## SPIS TREŚCI

Ivanna Chaikovska – Międzynarodowe normy płynności jako uzupełniające miary bezpieczeństwa banku oraz sektora bankowego	7
Sylwia Frydrych – Cena emisyjna w pierwszej ofercie publicznej a przyczyny wykluczenia spółki z NewConnect	23
Zofia M. Mazur – Unethical Advertising Practices in the Financial Market and Counteraction Tools	39
Artur Ochot – Mineral Resource Taxation in Poland as Environmental Revenue	55
Zofia M. Mazur – The Consumer Lending Protection. How to Prevent the Predatory Lending and “Debt Slavery” on The Small-Dollar Lending Market	71
Radosław Witczak – The Blockade of Bank Account by the Use of STIR – Danger or Protection for Taxpayers in the Light of SAC’s Decisions	93
Artur Zimny – The Impact of Asset Structure on a Company’s Financial Results Stability	107
Yuliia Melnychuk, Liudmyla Chvertko – Inclusiveness of Financial Activities of Hotel Institutions during the Covid-19 Pandemic	129
Dodatek kwartalny	147
Marta Padaszyńska – Laureaci Nagrody Banku Szwecji im. Alfreda Nobla w dziedzinie ekonomii w 2022 roku	148
Radosław Witczak – Zmiany w świecie podatków – poprawa Polskiego Ładu	149
Artur Zimny – Koniunktura w sektorze przedsiębiorstw niefinansowych	152
Zuzanna Pakuła, Patryk Krykwiński – Sytuacja gospodarcza w Polsce po III kwartale 2022 roku	159



# MIĘDZYNARODOWE NORMY PŁYNNOŚCI JAKO UZUPEŁNIAJĄCE MIARY BEZPIECZEŃSTWA BANKU ORAZ SEKTORA BANKOWEGO

Ivanna Chaikovska \*



<https://doi.org/10.18778/2391-6478.4.36.01>

## INTERNATIONAL LIQUIDITY STANDARDS AS COMPLEMENTARY MEASURES FOR BANK AND BANKING SECTOR SECURITY

### Abstract

**The purpose of the article** is to assess the security of Polish listed banks and the entire banking sector in terms of their liquidity. This article characterizes the liquidity of the Polish banking sector and Polish listed banks in the years 2009–2019. **Methodology.** The analysis was based on post-crisis LCR and NSFR liquidity ratios. The calculations used the financial data provided by the Bank Focus database, the Polish Financial Supervision Authority and consolidated financial statements of Polish listed banks. To achieve the set objective were used methods of comparing documents and legal acts (especially in the part of the article concerning the characteristics of the international standards of liquidity) and the methods of descriptive statistics (in the empirical part of the article). **Results of the research.** The above analysis is the basis for the verification of the hypothesis that international liquidity standards increase the level of security of Polish listed banks and the entire banking sector.

**Keywords:** bank, security, liquidity standards, Polish listed banks, liquidity ratio, bank safety.

**JEL Class:** G21, G3, E5, F5.

\* Magister, Wydział Zarządzania i Komunikacji Społecznej, Uniwersytet Jagielloński w Krakowie, e-mail: [ivanna.chaikovska@doctoral.uj.edu.pl](mailto:ivanna.chaikovska@doctoral.uj.edu.pl), <https://orcid.org/0000-0002-9425-2852>

## WSTĘP

Przed globalnym kryzysem finansowym lat 2009–2011, problematyka płynności banków nie była obszarem regulowanym na poziomie międzynarodowym oraz europejskim (Matz i Neu, 2007: 78–79). W konsekwencji tego, w okresie kryzysowym płynność stała się bardzo niedocenianym aspektem bezpieczeństwa poszczególnych banków, jak również całego sektora bankowego. W szczególności, znalazło to swoje odzwierciedlenie w czasach ostatniego kryzysu, gdy prawie wszystkie banki, korzystające z pomocy publicznej były oceniane jako wypłacalne pod względem wymogów kapitałowych, jednakże odnotowane trudności z płynnością doprowadzały do ich niewypłacalności. Powyższe uświadomiło potrzebę wprowadzenia regulacyjnych miar płynności, które byłyby uzupełnieniem miar adekwatności kapitałowej oraz wskaźników jakości aktywów w celu zapewnienia bezpieczeństwa poszczególnych banków oraz całego sektora bankowego. Dlatego w okresie pokryzysowym po raz pierwszy zostały wyznaczone ilościowe wymogi płynnościowe dla banków na poziomie międzynarodowym i europejskim.

Celem artykułu jest ocena bezpieczeństwa polskich banków giełdowych oraz całego sektora bankowego pod względem ich płynności. W nawiązaniu do powyższego, w niniejszym artykule scharakteryzowano płynność polskiego sektora bankowego oraz polskich banków giełdowych w latach 2009–2019. W szczególności została przeprowadzona szczegółowa analiza wypełnienia międzynarodowych norm LCR i NSFR przez banki notowane na Giełdzie Papierów Wartościowych w Warszawie, m.in. PKO Bank SA, Santander Bank SA, Pekao Bank SA, mBank SA, ING Bank SA, BNP Paribas Bank SA, Bank Millennium SA, Alior Bank SA, Getin Noble Bank SA, Bank Handlowy w Warszawie SA, Bank Ochrony Środowiska SA oraz Idea Bank SA. Powyższa analiza jest podstawą do weryfikacji hipotezy, stanowiącej iż międzynarodowe normy płynności zwiększają poziom bezpieczeństwa polskich banków giełdowych i całego sektora bankowego.

W pierwszej części artykułu przeanalizowano teoretyczne aspekty pokryzysowych norm płynności w Unii Europejskiej. W części empirycznej artykułu zanalizowany został poziom bezpieczeństwa polskiego sektora bankowego oraz banków giełdowych pod względem ich płynności. W drugiej części artykułu oceniono poziom płynności polskiego sektora bankowego oraz wybranych banków giełdowych na podstawie pokryzysowych norm, m.in. wskaźnika pokrycia płynności LCR oraz wskaźnika stabilnego finansowania netto NSFR. W artykule posłużono się metodą porównywania dokumentów i aktów prawnych (szczególnie w części artykułu, dotyczącej charakterystyki międzynarodowych standardów płynności) oraz metodami statystyki opisowej (w empirycznej części artykułu).



## 1. POKRYZYSOWE NORMY PŁYNNOŚCI W UNII EUROPEJSKIEJ: ASPEKTY TEORETYCZNE

W czasie globalnego kryzysu finansowego lat 2009–2011 odnotowane trudności z płynnością stawały się pierwszymi sygnałami problemów finansowych banków, zanim pojawiały się trudności z wypłacalnością czy z pogorszeniem się jakości portfela kredytowego. To oznacza, iż przeoczenie momentu, w którym bank ma problemy z płynnością, w krótkim czasie może doprowadzić do jego niewypłacalności, a następnie bankructwa bądź systemowej interwencji rządu (Iwanicz-Drozdowska, 2012: 58). W konsekwencji może to przyczynić się do zachwiania bezpieczeństwa banku. Ponadto ryzyko utraty płynności w zależności od wielkości i siły banku może w większym lub mniejszym stopniu oddziaływać na bezpieczeństwo całego sektora bankowego.

Doświadczenia ostatniego kryzysu finansowego uświadomiły potrzebę wprowadzenia regulacyjnych miar płynności, które byłyby uzupełnieniem miar adekwatności kapitałowej oraz wskaźników jakości aktywów w celu zapewnienia bezpieczeństwa poszczególnych banków oraz całego sektora bankowego<sup>1</sup>. Dlatego w 2010 roku na poziomie międzynarodowym w ramach zaleceń Bazylejskiego Komitetu ds. Nadzoru Bankowego, określanych mianem Bazylea III, po raz pierwszy zostały wyznaczone ilościowe wymogi płynnościowe dla banków, działających na skalę międzynarodową.

Celem wprowadzonych ilościowych wymogów płynnościowych była poprawa bezpieczeństwa funkcjonowania banków i zwiększanie ich odporności na sytuacje kryzysowe (Chaikowska, 2019b: 41). Ponadto, zwrócono uwagę na wzmocnienie krótkoterminowej odporności banków w zakresie ryzyka płynności, jak również strukturę finansowania działalności banku, ze szczególnym uwzględnieniem problemu dopasowania terminowej struktury aktywów i pasywów banku (Zygierewicz, 2016: 77; Koleśnik, 2014: 83).

Implementacja zaleceń bazylejskich na poziom europejski odbyła się poprzez wprowadzenie do porządku prawnego UE dyrektywy oraz rozporządzenia określanych mianem pakietu CRD IV/ CRR (*Capital Requirements Directive IV/Capital Requirements Regulation*) (Chaikowska, 2019a: 33). W konsekwencji, wprowadzone zostały ilościowe normy płynności poprzez obowiązek stosowania dwóch wskaźników, m.in.:

---

<sup>1</sup> Należy podkreślić, iż stanowiska krytyczne wobec miar bezpieczeństwa banku opartych wyłącznie na adekwatności kapitałowej pojawiły się w okresie przedkryzysowym, m.in. w ostatniej dekadzie XX w. Globalny kryzys finansowy w latach 2009–2011 doprowadził do wyjścia na jaw konsekwencji pominięcia dodatkowych rodzajów ryzyk przy ocenie bezpieczeństwa, m.in. ryzyka płynności. Zmusić także regulatorów zarówno na poziomie międzynarodowym, europejskim, jak i krajowym, do zainteresowania się sytuacją płynnościową banków (Gennotte and Pyle, 1991: 805–824; Niedziółka, 2012: 40).

- wskaźnika pokrycia płynności (*Liquidity Coverage Ratio* – LCR) oraz
- wskaźnika stabilnego finansowania (*Net Stable Funding Ratio* – NSFR).

Wyżej wymienione wskaźniki są ilościowym odzwierciedleniem dwóch rodzajów płynności<sup>2</sup>, odnoszących się do krótkoterminowej i długoterminowej sytuacji finansowej banku. W szczególności wskaźnik pokrycia płynności odnosi się do płynności krótkoterminowej, innymi słowy bieżącej, która oznacza zdolność do regulowania bieżących zobowiązań, wynikająca z dostatecznej ilości płynnych środków. Z kolei, wskaźnik stabilnego finansowania określa płynność długoterminową, innymi słowy strukturalną, czyli właściwą strukturę terminową aktywów i pasywów, która zapewnia ciągłość finansowania działalności banku<sup>3</sup>.

### 1.1. Wskaźnik pokrycia płynności LCR jako pokryzysowa norma płynności krótkoterminowej

Istota wskaźnika pokrycia płynności (LCR) sprowadza się do pytania, czy posiadany zapas aktywów o wysokiej płynności pozwala na pokrycie przewidywanego odpływu środków w sytuacji kryzysowej w ciągu 30 dni. Jest on determinowany relacją aktywa o wysokiej płynności (tj. zabezpieczenia przed utratą płynności) do wypływów środków netto w ciągu jednego miesiąca. Wskaźnik obliczany jest zgodnie z poniższym wzorem<sup>4</sup>:

$$= \frac{\text{Wskaźnik pokrycia płynności (LCR)} \\ \text{aktywa płynne o wysokiej jakości (high quality liquid assets)}}{\text{wypływ środków netto w ciągu 30 dni (net cash outflows over a 30-day time period)}}$$

Za aktywa płynne o wysokiej jakości zostały uznane aktywa, które mogą być łatwo i natychmiast zamienione na gotówkę przy niewielkiej lub żadnej utracie wartości, co powinno stanowić zabezpieczenie przed utratą płynności. Zaliczyć można do nich: gotówkę, rezerwy w banku centralnym, rynkowe papiery wartościowe emitowane lub gwarantowane przez państwo, banki centralne, międzynarodowe banki rozwoju, instytucje zaliczane do finansów publicznych poniżej szczebla centralnego, papiery wartościowe o wadze ryzyka wyższej niż 0%. Z kolei, wypływ środków netto w ciągu 30 dni zdefiniowany jest jako łączny,

<sup>2</sup> W niniejszym artykule jako płynność banku rozumie się zdolność banku do terminowego wywiązywania się z bieżących zobowiązań oraz możliwość kontynuowania działalności gwarantowanej właściwą strukturą terminową aktywów i pasywów.

<sup>3</sup> Terminy: wymagalności lokat i udzielania gwarancji są zgodne z terminami zapadalności aktywów i otrzymanych gwarancji (Hałaj, 2008: 16).

<sup>4</sup> Artykuł 412 Rozporządzenia (CRR) Parlamentu Europejskiego i Rady (UE) nr 575/2013 z dnia 26.06.2013 r. w sprawie wymogów ostrożnościowych dla instytucji kredytowych i firm inwestycyjnych.

oczekiwany odpływ gotówki pomniejszony o spodziewane wpływy gotówki w tym samym okresie w warunkach kryzysowych.

Minimalna wartość wskaźnika pokrycia płynności została ustalona na poziomie 100%. Był on stopniowo wprowadzany od 2015 r., a w pełni w Unii Europejskiej (dalej: UE) zaczął obowiązywać w 2018 r. Szczegółowy harmonogram stopniowego wdrażania wymogu płynności krótkoterminowej LCR w UE został przedstawiony w tabeli 1. Należy podkreślić, iż w UE pełne wdrożenie wskaźnika pokrycia płynności nastąpiło rok wcześniej (tj. 2018 r.) w porównaniu do zaleceń bazylejskich, według których powinno to być nastąpić w 2019 r. (The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools, 2013).

Tabela 1. Harmonogram wdrażania wymogu pokrycia płynności LCR w UE

	Od 01.10.2015	Od 01.01.2016	Od 01.01.2017	Od 01.01.2018
Minimalna wartość LCR	60%	70%	80%	100%

Źródło: opracowanie własne na podstawie: *Liquidity Coverage Requirement*, 2014.

## 1.2. Wskaźnik stabilnego finansowania netto (NSFR) jako pokryzysowa norma płynności długoterminowej

Drugim wymogiem dotyczącym spełnienia normy płynności długoterminowej wprowadzonym w Unii Europejskiej jest wskaźnik stabilnego finansowania netto (*Net Stable Funding Ratio* – NSFR). Ma on zapewnić stabilność finansowania banków w okresie jednego roku, gdyby wystąpiła sytuacja kryzysowa. Dodatkowo, norma NSFR ma przyczynić się do zmniejszenia skali niedopasowania wymagalności pasywów i zapadalności aktywów (Flotyński, 2017: 53). Wskaźnik obliczany jest według następującego wzoru:

$$\begin{aligned} & \text{Wskaźnik stabilnego finansowania netto (NSFR)} \\ & = \\ & \frac{\text{dostępne stabilne finansowanie}}{\text{wymagane stabilne finansowanie}} \end{aligned}$$

Współczynnik NSFR obliczany jest jako stosunek dostępnej kwoty finansowania stabilnego (tj. stabilne fundusze własne i obce) do sumy pozycji wymagających stabilnych źródeł finansowania (tj. aktywa niepłynne i o ograniczonej płynności) w okresie jednego roku przy rozszerzonym scenariuszu warunków skrajnych. Docelowa minimalna wartość tego wskaźnika została ustanowiona na poziomie 100%.

Definicja dostępnego finansowania długoterminowego obejmuje kapitał, akcje uprzywilejowane o terminie zapadalności dłuższym niż jeden rok, część depozytów bez terminu zapadalności lub z terminem krótszym niż jeden rok oraz część finansowania z rynku hurtowego o terminie krótszym niż jeden rok, które są spodziewane pozostać w banku dłużej, nawet w warunkach zaburzeń rynkowych. Wymienione pozycje pasywów tworzą licznik wskaźnika NSFR, którym są przepisane odpowiednie wagi procentowe, m.in. im bardziej są stabilne, tym większą przypisuje się im wagę. Szczegółowa analiza wag procentowych pozycji bilansowych została przedstawiona w tabeli 2. Przykładowo kapitał regulacyjny oraz depozyty o terminie zapadalności co najmniej jednego roku mają największą wagę 100%.

Tabela 2. Pozycje bilansowe i ich wagi potrzebne do obliczenia dostępnego stabilnego finansowania według metodyki BCBS-BIS

Składniki dostępnego stabilnego finansowania	Waga składnika	Rekomendowane działanie banku w celu dostosowania do normy NSFR
Kapitał regulacyjny	100%	Zwiększenie wartości pozycji
Stabilne depozyty (na żądanie) o nieustalonym terminie wymagalności i depozyty terminowe o terminie wymagalności poniżej 1 roku założone przez klientów detalicznych i małe przedsiębiorstwa	95%	Zwiększenie wartości pozycji
Mniej stabilne depozyty o nieustalonym terminie wymagalności i depozyty terminowe o terminie wymagalności poniżej 1 roku założone przez klientów detalicznych i małe przedsiębiorstwa	90%	Zwiększenie wartości pozycji
Finansowanie o terminie wymagalności poniżej 1 roku udzielone przez korporacje niefinansowe, państwa, przedsiębiorstwa publiczne, wielostronne i narodowe banki rozwoju, z uwzględnieniem finansowania zapewnianego przez banki centralne i instytucje finansowe	50%	Zmniejszanie wartości pozycji
<ul style="list-style-type: none"> <li>• Pozostałe zobowiązania i kapitały nieuwzględnione w powyższych kategoriach, z uwzględnieniem zobowiązań o nieustalonym terminie wymagalności (ze szczególnym uwzględnieniem zobowiązań na podatek odroczoney);</li> <li>• Wierzytelności (obowiązujące w dacie transakcji) powstałe w wyniku nabycia instrumentów finansowych, walut obcych lub surowców</li> </ul>	0%	Zmniejszanie wartości pozycji

Źródło: opracowanie własne na podstawie: *The Net Stable Funding Ratio*, 2014.

W mianowniku NSFR wyliczana jest wielkość wymaganego stabilnego finansowania, która uwzględnia pozycje aktywów banku. Podobnie, jak w przypadku licznika, zastosowania mają różne wagi – w im większym stopniu dany rodzaj aktywów wymaga pokrycia stabilnymi źródłami finansowania (jest mniej płynny), tym wyższą wagę przypisuje mu się. Szczegółowa analiza wag procentowych poszczególnych pozycji aktywów została przedstawiona w tabeli 3. Wagę 0% ma przykładowo gotówka oraz środki na rachunku w banku centralnym, natomiast kredyty hipoteczne mają wagę 65%.

Tabela 3. Pozycje bilansowe i ich wagi potrzebne do obliczenia wymaganego stabilnego finansowania według metodyki BCBS-BIS

Składniki wymaganego stabilnego finansowania	Waga składnik	Rekomendowane działanie banku w celu dostosowania do normy NSFR
<ul style="list-style-type: none"> <li>• Gotówka,</li> <li>• Środki na rachunku w banku centralnym,</li> <li>• Należności od banków centralnych z terminem zapadalności krótszym niż 6 miesięcy,</li> <li>• Należności (obowiązujące w dacie transakcji) powstałe w wyniku sprzedaży instrumentów finansowych, walut obcych lub surowców</li> </ul>	0%	Zwiększenie wartości pozycji
Nieobciążone aktywa poziomu 1, z wyłączeniem gotówki i środków na rachunku w banku centralnym	5%	Zwiększenie wartości pozycji
Nieobciążone pożyczki dla instytucji finansowych z terminem zapadalności krótszym niż 6 miesięcy, zabezpieczone aktywami poziomu 1 (zgodnie z definicją w LCR paragraf 50)	10%	Zwiększenie wartości pozycji
<ul style="list-style-type: none"> <li>• Pozostałe nieobciążone pożyczki dla instytucji finansowych z terminem zapadalności krótszym niż 6 miesięcy, które nie zostały uwzględnione w powyższych kategoriach,</li> <li>• Nieobciążone aktywa poziomu 2A</li> </ul>	15%	Zwiększenie wartości pozycji
<ul style="list-style-type: none"> <li>• Nieobciążone aktywa poziomu 2B,</li> <li>• Aktywa płynne wysokiej jakości (HQLA) obciążone na okres między 6 a 12 miesięcy,</li> <li>• Pożyczki dla instytucji finansowych i banku centralnego z terminem zapadalności między 6 a 12 miesięcy,</li> <li>• Depozyty zdeponowane w innych instytucjach finansowych w celach operacyjnych,</li> <li>• Pozostałe aktywa nieujęte w powyższych kategoriach o terminie zapadalności poniżej 1 roku, wliczając w to kredyty dla klientów korporacyjnych, detalicznych, małych przedsiębiorstw i pożyczek dla państw i przedsiębiorstw sektora publicznego,</li> </ul>	50%	Zmniejszenie wartości pozycji

<ul style="list-style-type: none"> <li>Nieobciążone kredyty hipoteczne o terminie zapadalności 1 roku i powyżej o wadze ryzyka co najwyżej 35% (według podejścia standaryzowanego),</li> <li>Pozostałe nieobciążone kredyty, nieuwzględnione w powyższych kategoriach, z wyjątkiem kredytów dla instytucji finansowych, o terminie zapadalności 1 roku i powyżej o wadze ryzyka co najwyżej 35% (według podejścia standaryzowanego)</li> </ul>	65%	Zmniejszanie wartości pozycji
<ul style="list-style-type: none"> <li>Gotówka, papiery wartościowe i inne aktywa ujmowane jako depozyt wstępny na instrumenty pochodne i gotówka lub inne aktywa będące składką do funduszu CCP na wypadek niewykonania zobowiązania,</li> <li>Pozostałe nieobciążone kredyty niezagrożone z wagą ryzyka powyżej 35% (według podejścia standaryzowanego) z terminem zapadalności co najmniej 1 rok, z wyłączeniem kredytów udzielonych instytucjom finansowym,</li> <li>Nieobciążone i niezaniechane papiery wartościowe, niekwalifikowane jako aktywa płynne wysokiej jakości z terminem zapadalności co najmniej 1 rok oraz akcje notowane na giełdach papierów wartościowych</li> <li>Surowce będące fizycznie w obrocie, z uwzględnieniem złota</li> </ul>	85%	Zmniejszanie wartości pozycji
<ul style="list-style-type: none"> <li>Wszystkie aktywa obciążone na okres 1 roku lub dłużej,</li> <li>Pozostałe aktywa nieuwzględnione w powyższych kategoriach, włączając w to kredyty zagrożone, pożyczki dla instytucji finansowych z terminem zapadalności 1 rok i dłużej, akcje nie notowane na giełdach papierów wartościowych, aktywa trwałe, pozycje pomniejszające kapitał regulacyjny, odsetki zatrzymane, aktywa ubezpieczeniowe, odsetki od spółek zależnych i papiery wartościowe zaniechane</li> </ul>	100%	Zmniejszanie wartości pozycji

Źródło: opracowanie własne na podstawie: *The Net Stable Funding Ratio*, 2014.

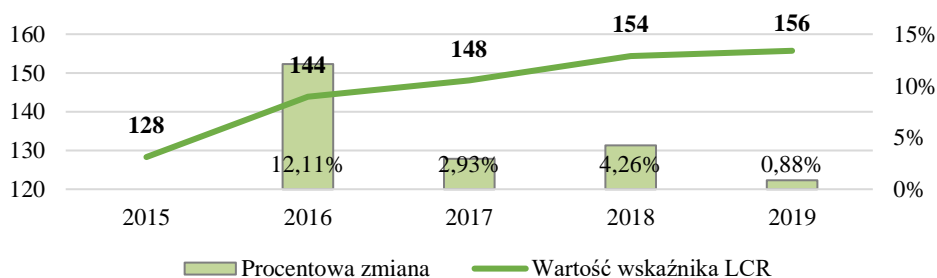
Norma płynności NSFR obejmuje analizę struktury bilansu banków, która ma na celu ograniczenie skali transformacji terminów, aby długoterminowe i właściwie niewypowiadalne kredyty nie były finansowane krótkoterminowymi (nawet jednodniowymi) depozytami międzybankowymi (Oleszko, 2010). Wskaźnik ten mierzy bowiem pokrycie określonych kategorii zobowiązań (bilansowych i pozabilansowych) wybranymi pozycjami aktywów w podziale terminowym oraz pokrycie aktywów niepłynnych funduszami własnymi pomniejszonymi o wartość wymogów kapitałowych z tytułu wybranych kategorii ryzyka.

Z pewnością dostosowania do minimalnej wartości NSFR (tj. 100%) pociągną za sobą istotne zmiany w bilansach banków oraz rachunkach zysków i strat. W szczególności dotyczy to instytucji bankowych niespełniających normy NSFR, których aktywa nie są w wystarczającym stopniu pokryte długoterminowym, stabilnym finansowaniem (Flotyński 2017: 54). W procesie dostosowania ogólna zasada w przypadku pasywów sprowadza się do tego, aby zwiększać udział stabilnych, długoterminowych źródeł finansowania, a zmniejszać udział zobowiązań

o wymagalności poniżej jednego roku. Z kolei, najważniejszą zasadą odnoszącą się do aktywów jest wzrost udziału pozycji wymagających niewielkiego pokrycia stabilnymi źródłami finansowania.

## 2. OCENA POZIOMU BEZPIECZEŃSTWA W SEKTORZE BANKOWYM W POLSCE ORAZ BANKACH GIEŁDOWYCH W ŚWIETLE POKRYZYSOWYCH NORM PŁYNNOŚCI

Wskaźnik LCR, jako obowiązkowy minimalny wymóg ilościowy w Polsce, podobnie jak w całej Unii Europejskiej, zaczął obowiązywać częściowo od 01 października 2015 r. oraz w pełni od 2018 r. Według danych KNF od 2015 r. większość banków spełniała również docelowy poziom wskaźnika LCR na poziomie 100%, a poziom tego wskaźnika w sektorze bankowym w Polsce kształtował się na poziomie wyższym od 128%. Szczegółowa analiza poziomu wskaźnika pokrycia płynności LCR polskiego sektora bankowego została przedstawiona na wykresie 1.



\* W 2015 r. wartość wskaźnika LCR wyliczona została za pomocą uśrednienia wartości wskaźników LCR polskich banków giełdowych.

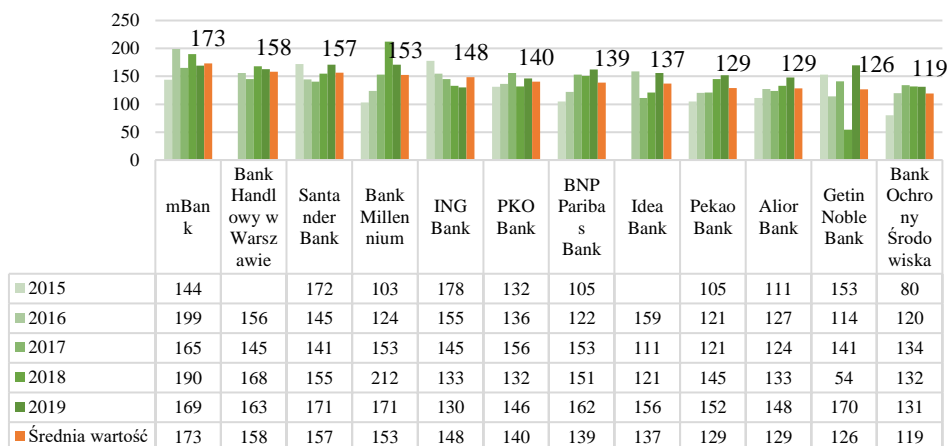
Wykres 1. Poziom wskaźnika pokrycia płynności LCR polskiego sektora bankowego w latach 2015–2019 [w %].

Źródło: opracowanie własne na podstawie danych Komisji Nadzoru Finansowego – *Informacja na temat sytuacji sektora bankowego w 2020 roku*, 2021: 51.

W latach 2015–2019 poziom wskaźnika pokrycia płynności LCR w sektorze bankowym w Polsce wynosił od 128 do 156%. Wartości te znacznie przekraczały wymagane minimum. W ciągu analizowanego okresu kontynuowany był pozytywny trend wzrostowy wartości wskaźnika, co prowadziło do wzmocnienia pozycji płynnościowej polskiego sektora bankowego. W szczególności, najwyższe procentowe tempo wzrostu było odnotowane w 2016 r. (12,11%), które pomimo

obserwowanego osłabienia tempa wzrostu w latach 2017–2018, zostało kontynuowane w następnych latach. Trwająca tendencja wzrostowa poziomu wskaźnika pokrycia płynności LCR polskiego sektora bankowego może świadczyć o wysokim poziomie bezpieczeństwa tego sektora. Jednak, jak zostało zaznaczone w raporcie KNF, bardzo wysokie wskaźniki LCR osiągnięte przez większość analizowanych banków, rodzą również obawy o to, czy wskaźnik ten nie jest zbyt liberalny w przypadku polskiego sektora bankowego, co może prowadzić do błędnej oceny faktycznego poziomu ryzyka płynności (*Raport o sytuacji banków w 2015 r.*, 2016: 33).

W celu prześledzenia faktycznej sytuacji płynnościowej polskich banków, na wykresie 2 przeprowadzona została szczegółowa analiza dostosowania się banków notowanych na Giełdzie Papierów Wartościowych w Warszawie do wypełnienia normy wskaźnika pokrycia płynności LCR w latach 2015–2019.



Wykres 2. Wskaźnik pokrycia płynności LCR polskich banków giełdowych w latach 2015–2019 [w %]

Źródło: opracowanie własne na podstawie danych z bazy Bank Focus (Bank Focus Database).

Z wykresu 2 wynika, iż w 2015 r. wszystkie analizowane banki spełniały obowiązującą normę LCR na poziomie 60%. Co więcej, prawie wszystkie banki objęte badaniem (z wyjątkiem Banku Ochrony Środowiska SA), spełniały również docelowy poziom tego wskaźnika 100%. Wśród analizowanych banków w latach 2015–2019, najwyższym przeciętnym poziomem wskaźnika pokrycia płynności LCR charakteryzowały się: mBank SA (173%), Bank Handlowy w Warszawie SA (158%) oraz Santander Bank SA (157%). Z kolei, do banków

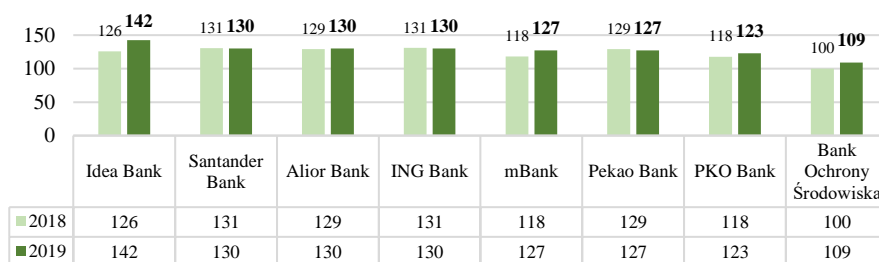


o najniższym przeciętnym poziomie tego wskaźnika należy zaliczyć: Bank Ochrony Środowiska SA (119%), Getin Noble Bank SA (126%) oraz Alior Bank SA (129%). Ponadto, wzrostowy trend tego wskaźnika zaobserwowano m.in. w mBanku SA, Millennium Banku SA, BNP Paribas Banku SA, Pekao Banku SA, Alior Banku SA oraz Banku Ochrony Środowiska SA. Natomiast trend spadający wystąpił m.in. w ING Banku SA oraz Getin Noble Banku SA. Należy podkreślić, iż w niektórych bankach (m.in. Banku Handlowym w Warszawie SA, Santander Banku SA oraz PKO Banku SA) poziom wskaźnika LCR w analizowanym okresie kształtował się na stabilnym poziomie z nieznacznymi wahaniami.

Jak wskazują wyniki analizy, na przestrzeni lat 2015–2019 poziom płynności krótkoterminowej polskich banków był na poziomie powyżej wymaganego. Wyjątek stanowi Getin Noble Bank SA, dla którego poziom wskaźnika LCR w 2018 r. wyniósł 54%, znacząco poniżej obowiązującej normy LCR w krajach UE (tj. 100%). Jak zaznaczono w skonsolidowanym sprawozdaniu finansowym, w listopadzie 2018 r. bank utracił płynność wskutek natężenia spekulacji medialnych oraz niepewności klientów (*Skonsolidowane sprawozdanie finansowe Grupy Kapitałowej Getin Noble Bank SA za rok zakończony dnia 31 grudnia 2018 r.*, 2019: 17). W konsekwencji, doprowadziło to do wzmoczonego wypływu środków ulokowanych w tym banku oraz spadku wskaźnika LCR. W celu odbudowy pozycji płynnościowej na przełomie lat 2018–2019 Getin Noble Bank SA uruchomił działania wynikające z Planu Awaryjnego utrzymania płynności w sytuacjach kryzysowych. Bank dokonał m.in. sprzedaży papierów dłużnych z portfela płynnościowego, pozyskał kredyt refinansowy z Narodowego Banku Polskiego, ograniczył działalność kredytową w wybranych obszarach oraz istotnie podwyższył oprocentowanie depozytów.

Z jednej strony, utrzymanie przez prawie wszystkie polskie banki giełdowe wskaźnika pokrycia płynności na poziomie wyższym niż 100% może świadczyć o wysokim poziomie bezpieczeństwa analizowanych banków. Z drugiej strony, bezproblemowe wypełnienie normy płynnościowej LCR przez banki objęte badaniem w latach 2015–2019 mogło być bezpośrednio powiązane z wprowadzeniem wiążących norm płynności przez KNF w okresie przedkryzysowym (Kuligowska, 2019).

Wskaźnik stabilnego finansowania netto NSFR jako obowiązkowy minimalny wymóg ilościowy zaczął obowiązywać europejskie banki od stycznia 2018 r. To oznacza, że zarówno w Polsce, jak w całej Unii Europejskiej, każdy bank jest zobligowany spełniać tę normę płynności na potrzeby oceny nadzorczej. Analiza dostosowania polskich banków giełdowych do wskazanej normy w latach 2018–2019 została przedstawiona na wykresie 3.



\* brak danych dotyczących poziomu wskaźnika NSFR w sprawozdaniach banków: BNP Paribas SA, Bank Millennium SA, Bank Handlowy w Warszawie SA oraz Bank Ochrony Środowiska SA. W 2018 r. dla Banku Ochrony Środowiska SA poziom wskaźnika NSFR przyjęto na poziomie 100% na podstawie zapisu w skonsolidowanym sprawozdaniu finansowym o treści: „Bank posiada dla tego wskaźnika wewnętrzną wartość ostrzegawczą na poziomie docelowego limitu nadzorczego tj. 100%”.

Wykres 3. Wskaźnik stabilnego finansowania netto NSFR polskich banków giełdowych w latach 2018–2019 [w %]

Źródło: opracowanie własne na podstawie danych z bazy Bank Focus oraz rocznych skonsolidowanych sprawozdań finansowych analizowanych banków.

Z wykresu 3 wynika, iż płynność długookresowa wyrażona przez wskaźnik stabilnego finansowania NSFR analizowanych banków giełdowych w latach 2018–2019 była zróżnicowana. Przy tym należy podkreślić, iż wspólną cechą jest fakt, iż w badanym okresie wszystkie analizowane banki spełniały obowiązującą normę NSFR na poziomie 100%. Najwyższy poziom wskaźnika w 2019 r. odnotował Idea Bank SA (142%), natomiast najniższy – Bank Ochrony Środowiska SA (109%). W większości analizowanych banków można dostrzec tendencję wzrostową wskaźnika stabilnego finansowania netto, która była wynikiem zmian wielkości poszczególnych pozycji aktywów oraz/lub zmian wielkości poszczególnych pozycji pasywów tych banków. Z kolei, w niektórych bankach (m.in. Santander Banku SA, ING Banku SA oraz Pekao Banku SA) poziom wskaźnika w analizowanym okresie utrzymywał się na stabilnym poziomie z nieznacznymi wahaniami.

W celu dalszych wzrostów wartości wskaźnika NSFR polskie banki giełdowe powinny zwiększyć wartość dostępnego stabilnego finansowania (wartość licznika) lub zmniejszyć wymagane stabilne finansowanie (wartość mianownika). To oznacza, iż w ramach pasywów należy zwiększać udział pozycji z wysokimi wagami, np. kapitałów własnych *Tier 1* oraz stabilnych depozytów (w szczególności depozytów długoterminowych). Z kolei, w ramach aktywów należy zwiększać udział pozycji z niskimi wagami, tj. pozycji, które nie wymagają wcale (lub nie-

wiele) pokrycia stabilnymi źródłami finansowania (np. gotówka, środki na rachunku w banku centralnym, należności od banków centralnych z terminem zapadalności krótszym niż 6 miesięcy).

Porównując dynamikę kształtowania się wskaźnika LCR (wykres 2) oraz wskaźnika NSFR (wykres 3), można wyciągnąć następujące wnioski:

- najbardziej bezpiecznym pod względem płynności krótkoterminowej wśród analizowanych banków w 2019 r. były Santander Bank SA oraz Millennium Bank SA, wskaźnik LCR dla tych banków był na poziomie 171%,

- najbardziej bezpiecznym pod względem płynności długoterminowej w 2019 r. był Idea Bank SA. Wskaźnik NSFR wyniósł 142%, natomiast wskaźnik LCR 156%,

- najbardziej bezpiecznym bankiem pod względem dwóch rodzajów płynności w 2019 r. był Santander Bank SA. Wskaźniki LCR i NSFR wyniosły odpowiednio 171% oraz NSFR 130%. Bank ten w 2019 r. charakteryzował się znaczącym poziomem nadpłynności zarówno w krótko-, jak i w długoterminowej perspektywie,

- najmniej bezpiecznym pod względem dwóch rodzajów płynności w 2019 r. był Bank Ochrony Środowiska SA. Wskaźnik płynności krótkoterminowej wyniósł 131%, a płynności długoterminowej – 109%.

Z wyżej przeprowadzonej analizy wskaźników płynności LCR i NSFR wynika, że wprowadzenie pokryzysowych norm płynności nie było silnym szokiem dla banków działających w Polsce, gdyż już wcześniej obowiązywały je krajowe normy o charakterze ilościowym. W wyniku wypełnienia przez analizowane banki minimalnych norm LCR i NSFR, wszystkie objęte badaniem banki działające w Polsce można uznać za bezpieczne pod względem ich sytuacji płynnościowej (wyjątek stanowił Getin Noble Bank SA w 2018 r.).

## PODSUMOWANIE

Banki opierają swoją działalność głównie na zewnętrznych źródłach finansowania. Są zobowiązane zarządzać bilansem w taki sposób, aby terminowo realizować zobowiązania wobec deponentów i innych inwestorów, którzy powierzyli im swoje środki. Jest to podstawowy warunek utrzymania płynności i zachowania zaufania ze strony klientów, co pozwala zachować stały dostęp do źródeł finansowania działalności i ciągłości funkcjonowania banku. Ponadto, jak pokazują doświadczenia kryzysu finansowego, który miał miejsce w latach 2009–2011 utrzymanie płynności jest ważne z perspektywy bezpieczeństwa banku oraz całego sektora bankowego. W okresie pokryzysowym na poziomie międzynarodowym, a następnie europejskim i krajowym, zostały wprowadzone normy płynności

krótko- i długoterminowej, m.in. wskaźnik pokrycia płynności LCR oraz stabilnego finansowania netto NSFR.

Analiza dostosowania do wyżej wymienionych norm wskazuje, iż w latach 2015–2019 polski sektor bankowy można uznać za bezpieczny pod względem ich płynności krótko- i długoterminowej. Ponadto z badania wynika, iż wprowadzenie pokryzysowych norm płynności nie było silnym szokiem dla banków działających w Polsce, ponieważ już wcześniej obowiązywały je krajowe normy płynnościowe o charakterze ilościowym (m.in. wskaźniki płynności M1, M2, M3 oraz M4). Należy podkreślić, iż wprowadzenie i utrzymanie krajowych miar płynności w okresie przedkryzysowym przyczyniło się do tego, iż polskie banki były przygotowane do implementacji pokryzysowych norm LCR i NSFR. W konsekwencji, przełożyło się to na bezproblemowe dostosowanie się polskich banków do nowych wymagań w zakresie płynności.

Ponadto, w wyniku analizy wskaźnika LCR (wykres 2) oraz wskaźnika NSFR (wykres 3) zostały wyciągnięte następujące wnioski:

- najbardziej bezpiecznym pod względem dwóch rodzajów płynności w 2019 r. był Santander Bank SA ze wskaźnikiem LCR o wartości 171% oraz wskaźnikiem NSFR równym 130%,

- najmniej bezpiecznym pod względem dwóch rodzajów płynności w 2019 r. był Bank Ochrony Środowiska SA. Wskaźniki LCR i NSFR wyniosły odpowiednio 131% oraz 109%.

Spełnianie przez bank pokryzysowych wymogów LCR i NSFR nie stanowi jednak gwarancji, że bank jest odporny na odpływ środków zewnętrznych i realizację ryzyka płynności. Jak pokazują doświadczenia, żadne rozwiązanie nie jest w stanie w pełni zabezpieczyć bank przed masowym, skumulowanym w czasie, odpływem środków. Potwierdzeniem tego, może być zdarzenie utraty płynności przez Getin Noble Banku SA, które miało miejsce w listopadzie 2018 r. Nastąpiło ono wskutek natężenia spekulacji medialnych oraz niepewności klientów dotyczących sytuacji finansowej banku (*Skonsolidowane sprawozdanie finansowe Grupy Kapitałowej Getin Noble Bank SA za rok zakończony dnia 31 grudnia 2018 r.*, 2019: 17). Warto zaznaczyć, że przed doświadczeniem gwałtownego odpływu depozytów klientów bank ten miał relatywnie wysokie wskaźniki płynności krótkoterminowej LCR (wykres 2). Świadczy to o krytycznym znaczeniu kanału zaufania klientów dla sytuacji płynnościowej banku<sup>5</sup>, który może spowodować konieczność realizacji wypłat w skali wyższej niż wynikałoby to z terminów zapadalności zobowiązań. W nawiązaniu do powyższego, do głównych przyczyn utraty płynności przez banki można zaliczyć między innymi:

---

<sup>5</sup> Rozwiązaniem systemowym, które powinno ograniczyć skłonność większości deponentów do wycofywania środków z banków – bez względu na okoliczności – są publiczne gwarancje depozytowe (do wysokości równej 100 tys. euro) – *Raport o stabilności systemu finansowego*, 2019.

- „run” na banki, czyli masowe i w dużej mierze mające podłoże psychologiczne, wycofywania depozytów z banków;
- efekt domina braku płynności lub zarażenia się brakiem płynności (problemy płynnościowe jednego banku determinują niedobór płynności wśród niektórych jego kontrahentów);
- zaprzestanie funkcjonowania międzybankowego rynku kredytowego wskutek utraty wzajemnego zaufania między bankami;
- niedopasowanie strukturalne aktywów i pasywów wyrażające się w finansowaniu długoterminowych niepłynnych aktywów krótkoterminowymi niestabilnymi źródłami finansowania.

Podsumowując należy podkreślić, iż hipoteza badawcza została potwierdzona. Dostosowanie się banków do pokryzysowych regulacji prawnych w zakresie międzynarodowych miar płynności, przyczynia się do zwiększenia poziomu bezpieczeństwa polskich banków giełdowych i całego sektora bankowego.

## BIBLIOGRAFIA

- Bank Focus Database, <https://www.bvdinfo.com/en-us/our-products/data/international/bank-focus> [dostęp 01.03.2020].
- Chaikowska, I. (2019a). Regulacje finansowe Unii Europejskiej w okresie pokryzysowym a działania dyscyplinujące nadzoru bankowego. *Głos Prawa. Przegląd Prawniczy Allerhanda*, 1(3).
- Chaikowska, I. (2019b). Zasada zapewnienia zgodności i działania dyscyplinujące organów nadzoru bankowego w okresie pokryzysowym. *Bezpieczny Bank*, 3(76).
- Flotyński, M. (2017). Wskaźnik stabilnego finansowania netto (NSFR) a zmiany w strukturze aktywów i pasywów banków. *Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach*, 325.
- Gennotte, G. and Pyle, D. (1991). Capital Controls and Bank Risk. *Journal of Banking and Finance*, 15(4–5). [http://dx.doi.org/10.1016/0378-4266\(91\)90101-Q](http://dx.doi.org/10.1016/0378-4266(91)90101-Q) [dostęp 15.09.2021].
- Hałaj, G. (2008). Przegląd metod badania płynności banków. *Bank i Kredyt*, lipiec.
- Informacja na temat sytuacji sektora bankowego w 2020 roku (2021). Komisja Nadzoru Bankowego, [https://www.knf.gov.pl/knf/pl/komponenty/img/Informacja\\_na\\_temat\\_sytuacji\\_sektora\\_bankowego\\_w\\_2020\\_roku.pdf](https://www.knf.gov.pl/knf/pl/komponenty/img/Informacja_na_temat_sytuacji_sektora_bankowego_w_2020_roku.pdf) [dostęp 10.08.2021].
- Iwanicz-Drozdowska, M. (2012). Regulacje nadzorcze a zarządzanie ryzykiem. W: M. Iwanicz-Drozdowska, red., *Zarządzanie ryzykiem bankowym*. Warszawa: Wydawnictwo Poltext.
- Koleśnik, J. (2014). Regulacyjne miary płynności w bankach jako dopełnienie miar adekwatności kapitałowej. *Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie, Zeszyty Naukowe UEK*, 10(934).
- Kuligowska, A. (2019). Zarządzanie ryzykiem płynności i ryzykiem stopy procentowej w księdze bankowej w banku spółdzielczym, KNF. [https://www.knf.gov.pl/knf/pl/komponenty/img/Prezentacja%20CEDUR%2031-07-2019\\_66875.pdf](https://www.knf.gov.pl/knf/pl/komponenty/img/Prezentacja%20CEDUR%2031-07-2019_66875.pdf) [dostęp 23.09.2021].
- Liquidity Coverage Requirement Delegated Act. Frequently Asked Questions* (2014). European Commission. [https://ec.europa.eu/commission/presscorner/detail/en/MEMO\\_14\\_579](https://ec.europa.eu/commission/presscorner/detail/en/MEMO_14_579) [dostęp 16.06.2021].
- Matz, L. and Neu, P. (2007). *Liquidity risk measurement and management: A practitioner's guide to global best practices*. Singapore City: Wiley Finance Series, Wiley&Sons.

- Niedziółka, P. (2012). Perspektywy wdrożenia międzynarodowych norm płynności dla banków, Szkoła Główna Handlowa. <https://journals.pan.pl/Content/87339/mainfile.pdf> [dostęp 10.06.2021].
- Oleszko, M. i Mogilnicki, P. (2010). Zarządzanie płynnością banku oraz firm inwestycyjnych w sytuacjach. *Eforum Bankowość i Finanse*, lipiec. [https://nmf.knf.gov.pl/Microportals/NMF/Imagery/ryzyko\\_plynnosci\\_tcm74-23540.pdf](https://nmf.knf.gov.pl/Microportals/NMF/Imagery/ryzyko_plynnosci_tcm74-23540.pdf) [dostęp 18.06.2021].
- Raport o stabilności systemu finansowego. Wydanie specjalne: skutki pandemii COVID-19* (2020). Narodowy Bank Polski, czerwiec 2020 r. <https://www.nbp.pl/systemfinansowy/rsf062020.pdf> [dostęp 05.05.2021].
- Raport o sytuacji banków w 2015 r.* (2016). Komisja Nadzoru Bankowego, [https://www.knf.gov.pl/knf/pl/komponenty/img/RAPORT\\_O\\_SYTUACJI\\_BANKOW\\_2015\\_47215.pdf](https://www.knf.gov.pl/knf/pl/komponenty/img/RAPORT_O_SYTUACJI_BANKOW_2015_47215.pdf) [dostęp 10.07.2021].
- Rozporządzenie (CRR) Parlamentu Europejskiego i Rady (UE) nr 575/2013 z dnia 26.06.2013 r. w sprawie wymogów ostrożnościowych dla instytucji kredytowych i firm inwestycyjnych.
- Skonsolidowane sprawozdanie finansowe Grupy Kapitałowej Getin Noble Bank SA za rok zakończony dnia 31 grudnia 2018 roku* (2019), <https://www.gnb.pl/> [dostęp 19.07.2021].
- The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools* (2013). Bank of International Settlements, Basel Committee on Banking Supervision.
- The Net Stable Funding Ratio, Consultative Document Basel III* (2014). Bank for International Settlement (BIS), Basel Committee on Banking Supervision.
- Zygierewicz, M. (2016). Charakterystyka wymogów płynnościowych. W: M. Marcinkowska, P. Wdowiński, red., *Wpływ regulacji kapitałowych i płynnościowych sektora bankowego na wzrost gospodarczy Polski*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.

Zakończenie recenzji/ End of review: 14.06.2022

Przyjęto/Accepted: 02.11.2022

Opublikowano/Published: 23.11.2022

# CENA EMISYJNA W PIERWSZEJ OFERCIE PUBLICZNEJ A PRZYCZYNY WYKLUCZENIA SPÓŁKI Z NEWCONNECT

Sylwia Frydrych\*



<https://doi.org/10.18778/2391-6478.4.36.02>

## THE ISSUE PRICE IN THE INITIAL PUBLIC OFFERING AND THE REASONS FOR EXCLUDING THE COMPANY FROM NEWCONNECT

### Abstract

**The purpose of the article.** The subject of this article is the analysis of the change in the share price on the day of the company's debut on the NewConnect market due to the reasons for its exclusion from trading. The analysis was carried out for all companies debuting on NewConnect in 2007–2020. The results are presented depending on the share issue price. The paper hypothesized that companies whose share issue price was incorrectly estimated, which means overvalued or undervalued IPO, are more often withdrawn from the NewConnect market. **Methodology.** The research was carried out using the analysis of source data. In the research process, the author used, in addition to the analysis of the literature, the method of observation. **Results of the research.** As a result of the research, it was found that 39.84% of companies that debuted on the NewConnect market in 2007–2020 were excluded from trading. 56.28% of the withdrawn companies were forcibly excluded. On the other hand, 108 companies were withdrawn from trading voluntarily, and the prevailing premise in this group of entities was the transfer of the company to the WSE Main Market. Voluntary reasons prevail among entities withdrawn from trading, whose shares had an issue price of PLN 5 and higher. On the other hand, in the group of "penny" companies, the main reason for delisting is the safety of trading and liquidation bankruptcy. An increase in the share price on the debut day was recorded in 69.64% of entities withdrawn from NewConnect. The adopted hypothesis was positively verified. Companies whose share issue price was not properly estimated were withdrawn from the NewConnect market more often than entities whose securities price did not change on the day of their debut. The level of withdrawn companies whose IPO was overvalued and undervalued is similar. The conducted research proves that among overvalued initial public offerings, the share of voluntary reasons for withdrawal prevails, while among undervalued ones there is a higher share of forcibly excluded entities. However, the amount of the issue price according to the ranges adopted in the study does not constitute a premise for the withdrawal of companies from the NewConnect market.

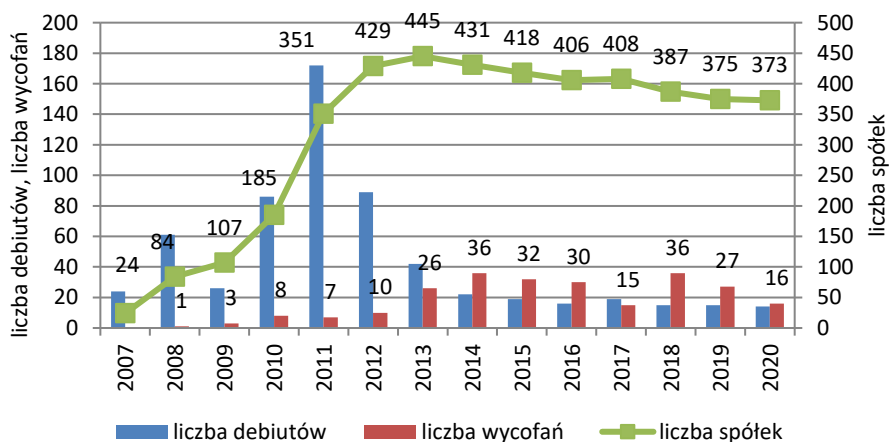
**Keywords:** NewConnect, initial public offering, Alternative Trading System, delisting, issue price.

**JEL Class:** G14, G23, G40.

\* Doktor, Kolegium Zarządzania i Finansów, Szkoła Główna Handlowa w Warszawie, e-mail: [sylwia.frydrych@sgh.waw.pl](mailto:sylwia.frydrych@sgh.waw.pl), <https://orcid.org/0000-0002-1215-49500>

## WSTĘP

W 2020 r. na NewConnect, zorganizowanym rynku akcji prowadzonym przez GPW poza rynkiem regulowanym w formie alternatywnego systemu obrotu (ASO), notowane były akcje 373 spółek. Rok wcześniej w obrocie znajdowało się 375 podmiotów. Najwięcej, tj. 172 debiutów, odnotowano w 2011 r. Począwszy od 2013 r. obserwowany jest spadek liczby notowanych spółek na NewConnect. Natomiast od 2014 r. (oprócz 2017 r.) można zaobserwować, iż wycofania spółek z obrotu na rynku NewConnect przewyższają debiuty (wykres 1).



Wykres 1. Liczba spółek, liczba debiutów oraz wycofań spółek z NewConnect (w szt.)

Źródło: opracowanie własne na podstawie Roczników Giełdowych (www1).

Wzrost wycofywanych spółek z obrotu w połączeniu ze spadkiem liczby pierwszych ofert publicznych przyczynia się do analizy przyczyn wykluczeń spółek z giełdy.

Na podstawie § 12 pkt. 1 Regulaminu Alternatywnego Systemu Obrotu (Uchwała Nr 147/2007 Zarządu Giełdy z dnia 1 marca 2007 r. z późn. zm.) Giełda Papierów Wartościowych SA (GPW), będąc organizatorem rynku NewConnect, może wykluczyć instrumenty finansowe z obrotu. W szczególności jest to konieczne ze względu na bezpieczeństwo obrotu; jeżeli emitent narusza przepisy ASO; z powodu otwarcia likwidacji emitenta; na skutek fuzji jak również na podstawie wniosku emitenta (także w sytuacji, gdy wykluczenie papierów wartościowych z obrotu jest spowodowane wprowadzeniem ich do obrotu na Główny Rynek GPW). Przy czym Art. 91 Ustawy z dnia 29 lipca 2005 r. o ofercie publicznej



i warunkach wprowadzania instrumentów finansowych do zorganizowanego systemu obrotu oraz o spółkach publicznych precyzuje, iż wykluczenie akcji na wniosek emitenta stanowi ich wycofanie z obrotu w alternatywnym systemie obrotu.

Cena emisyjna akcji to cena sprzedawanych papierów wartościowych przez emitenta podczas pierwszej oferty publicznej (Initial Public Offerings, IPO). Gdy cena na koniec pierwszego dnia notowania jest wyższa od ceny emisyjnej akcji to papiery wartościowe debiutującej spółki są niedowartościowane (IPO Underpricing). Przewartościowanie ma miejsce, gdy cena na koniec dnia debiutu jest niższa niż cena emisyjna. Wysokość ceny emisyjnej jest istotna w obliczu wzrostu liczby wycofanych spółek z rynku NewConnect.

Przedstawione rozważania prowadzą do określenia problemu badawczego jakim jest pytanie, czy przewartościowanie pierwszej oferty publicznej może stanowić o przyczynie wykluczenia spółki z obrotu na rynku NewConnect.

Celem niniejszego artykułu jest analiza ceny akcji w dniu debiutu spółki na rynku NewConnect wobec przyczyn jej wykluczenia z obrotu. Badanie przeprowadzono dla wszystkich podmiotów debiutujących na rynku NewConnect w latach 2007–2020. Zakres przedmiotowy artykułu obejmuje przyczyny wykluczenia przewartościowanych, jak również niedowartościowanych pierwszych ofert publicznych. Wyniki zaprezentowano w zależności od wysokości ceny emisyjnej. Ponadto w pracy postawiono hipotezę, iż spółki, których cena emisyjna akcji była niewłaściwie oszacowana, co oznacza przewartościowanie lub niedowartościowanie IPO, częściej są wycofywane z rynku NewConnect.

W pierwszej części tekstu zostały zaprezentowane przyczyny wycofania spółki z NewConnect, które znajdują się w regulacjach dotyczących funkcjonowania rynku zorganizowanego przez GPW w formule alternatywnego systemu obrotu. Następnie dokonano przeglądu badań dotyczących przyczyn wycofania spółek z obrotu giełdowego. W części empirycznej przeprowadzono analizę przyczyn wykluczenia spółek, które zostały wprowadzone do obrotu na rynku NewConnect w latach 2007–2020 w zależności od kształtowania się ceny akcji na koniec pierwszego dnia notowań. Podsumowanie artykułu stanowią wnioski dotyczące przeprowadzonych badań.

## **1. DETERMINANTY WYCOFANIA SPÓŁKI Z OBROTU GIEŁDOWEGO**

Delisting (wycofanie, wykluczenie) spółki z obrotu giełdowego, który jest procesem odwrotnym do jej wprowadzenia na giełdę, stanowił przedmiot licznych badań międzynarodowych (Sanger i Peterson 1990: 261–272; Clyde et al., 1997: 2103–2112; You et al., 2012: 200–216).

W literaturze zaproponowano rozróżnienie przyczyn wycofania spółki z obrotu na giełdzie na przymusowe oraz dobrowolne w zależności od tego, czy inicjatorem wykluczenia jest giełda, czy spółka (Macey et al., 2008: 683–713). W pierwszym przypadku władze giełdy dokonują wykluczenia spółki z obrotu, podczas gdy w drugim wycofanie następuje na skutek decyzji podjętej przez władze spółki.

Wykluczenie przymusowe dotyczy sytuacji, gdy podmiot zostaje wycofany z obrotu z powodu naruszenia obowiązujących przepisów. Ponadto przyczynę obligatoryjnego usunięcia z giełdy spółki stanowi jej upadłość oraz likwidacja. Natomiast dobrowolne wycofanie, wskutek decyzji podjętej przez władze spółki, spowodowane jest najczęściej przeniesieniem na rynek regulowany. Proces przymusowego wykluczenia z obrotu jest zainicjowany przez władze giełdy w konsekwencji naruszenia przez emitentów regulacji dotyczących obrotu. Innymi słowy, usunięcie spółki z notowań jest konsekwencją naruszenia zasad dotyczących obrotu, które obowiązują podmioty notowane na giełdzie (Pour i Lasfer, 2013: 4850–4860). Natomiast przymusowy delisting spółki, która nie wypełnia wymogów wynikających z regulaminu obrotu, wynika z rzetelności egzekwowania zasad obrotu przez władze giełdy (Martinez i Serve, 2016: 733–770). Kolejną przyczyną wymaganego przepisami wycofania spółki z obrotu jest upadłość lub likwidacja. Zatem w tej sytuacji wykluczenie z obrotu nie jest spowodowane decyzją władz spółki, mimo iż może być spowodowane pośrednio wynikiem podejmowanych przez nią działań. Przykładem jest wykluczenie spółki, która celowo złożyła wnioski o upadłość.

Przymusowy delisting oznacza koniec obrotu dla wykluczonych podmiotów. Natomiast dobrowolne wycofanie spółki z obrotu może zostać sklasyfikowane na podstawie tego czy spółka kontynuuje działalność poprzez zmianę rynku notowań, czy zaprzestaje funkcjonowania jako spółka publiczna. W związku z powyższym można wyróżnić dobrowolne wycofanie spółki z giełdy bez późniejszego obrotu, jak również z obrotem po zmianie parkietu notowań. Wycofanie spółki z obrotu z własnej woli, bez późniejszego wprowadzenia do notowań na innym rynku, jest związane z transakcją pomiędzy spółką wycofującą się z giełdy a jej udziałowcami. Proces ten może być konsekwencją fuzji. Ten rodzaj delistingu następuje po połączeniu spółki z innym podmiotem. Wówczas staje się ona własnością także inwestorów, którzy nie są zainteresowani publicznym obrotem akcjami spółki (Leuz et al., 2008: 181–208). Ponieważ decyzję podejmuje spółka a nie władze giełdy, które są inicjatorami obligatoryjnego usunięcia z obrotu, stąd ten typ wykluczenia spółki z giełdy jest postrzegany w literaturze jako działanie dobrowolne (DeAngelo et al., 1984: 367–401). Natomiast delisting na skutek zmiany parkietu notowań oznacza, iż spółka może zostać usunięta z alternatywnego systemu obrotu w ramach przeniesienia na główny parkiet, na którym będzie nadal

notowana. Ten typ delistingu stanowi transfer spółki na rynek regulowany i świadczy o jej rozwoju.

W literaturze znajdują się badania dotyczące zarówno dobrowolnego wycofania spółki z notowań (Bessler et al., 2012: 1024–1053), jak również opracowania, które nie różnicują wykluczenia spółki z obrotu według wymienionych przyczyn (Beaver et al., 2007: 341–368; Dewenter et al., 2010: 456–468; Bakke et al., 2012: 183–193).

Wycofanie spółki z giełdy z własnej woli, bez zmiany parkietu notowań, nasuwa pytanie o przesłanki, którymi kierują się podmioty rezygnując z funkcjonowania jako podmiot publiczny. Decyzja o wycofaniu z giełdy jest podejmowana przez zarządzających spółkami w sytuacji, gdy koszty związane z wprowadzeniem do notowań przewyższają korzyści, które wynikają z funkcjonowania jako spółka publiczna (Bharath i Dittmar, 2010: 1771–1818). Po raz pierwszy problem ten został zbadany na próbie włoskich spółek, których kierownictwo jako powód przeprowadzenia oferty publicznej wskazało, porównując z kredytem, obniżenie kosztu pozyskanego finansowania (Pagano et al., 1998: 27–64). Badania dotyczące determinant wprowadzenia akcji przez emitentów na giełdę prowadzili także Bancel i Mittoo (2009: 844–884), którzy dostrzegli, iż do najważniejszych korzyści, których spółki oczekują z notowania należą możliwość pozabankowego pozyskiwania kapitału, wzrost reputacji spółki. Natomiast motywy przyczyniające się wprowadzenia papierów wartościowych do notowań na giełdzie to m.in. finansowanie inwestycji oraz transfer kapitału od nowych akcjonariuszy do dotychczasowych udziałowców (Kim i Weinsbach, 2008: 281–307). Jednakże funkcjonowanie spółki na rynku publicznym determinuje także wzrost kosztów. Oprócz kosztów związanych z przeprowadzeniem IPO, notowane podmioty ponoszą także bieżące opłaty, które wynikają z obecności giełdzie. W konsekwencji jednym z powodów, dla którego spółka ponownie zamierza stać się podmiotem prywatnym jest wyeliminowanie kosztów, których ponoszenie jest niezbędne będąc notowaną na giełdzie (Bessler, 2022). W szczególności, gdy nie jest wymagane dalsze finansowanie (Engelen i in., 2020: 188–217).

Informacje pojawiające się podczas pierwszej oferty publicznej, które mogą przyczyniać się do wycofania spółki z obrotu były przedmiotem analiz m.in. Bhambra i Pettway (2003: 369–397). Dotyczyły one rozmiarów emisji w stosunku do rozmiarów spółki. Wyższa wartość pierwszej oferty publicznej wskazuje, że skutek napływu kapitału zwiększyła się wartość spółki. Ponadto można znaleźć w literaturze opracowania, które zwracają uwagę na ponadprzeciętny wzrost zysku ze sprzedaży w stosunku do poprzednich lat funkcjonowania spółki przeprowadzającej IPO (Teoh et al., 1998: 1935–1974).

Ball i Shivakumar (2008: 324–349) zauważyli, że zjawiska, które przyczyniają się do możliwości wycofania spółki przeprowadzającej IPO dotyczą: asymetrii informacji, kosztów agencji oraz zjawiska market timing. Bharath i Dittmar

(2010: 1771–1818) zaobserwowali dodatni związek pomiędzy prawdopodobieństwem wycofania podmiotu z giełdy a stopniem asymetrii informacji między emitentami a inwestorami. W obliczu silnej asymetrii informacji, obawy inwestorów, że zainwestowali w akcje niewłaściwego emitenta mogą spowodować niedowartościowanie cen akcji, a w dalszej konsekwencji dobrowolne wycofanie spółki z notowań, jako sposób na zmniejszenie asymetrii informacji.

W literaturze zidentyfikowano gorące okresy aktywności IPO, w których ma miejsce duża liczba IPO oraz zimne, które charakteryzuje niska liczba pierwszych ofert publicznych (Algebaly et al., 2014: 171–190). Spółki posiadające słabe wyniki przeprowadzają IPO w gorących okresach, aby skorzystać z nadmiernego optymizmu inwestorów (Ritter, 1991: 1–27; Loughrana i Ritter, 1995: 23–51). W związku z tym podmioty, które emitują papiery wartościowe w gorących okresach cechuje wyższe prawdopodobieństwo wycofania się z giełdy (Kooli i Meknassi, 2007: 105–119; Yung i in., 2008: 192–208).

Wiele opracowań dotyczy analizy zjawiska niewłaściwego oszacowania ceny emisyjnej podczas pierwszej oferty publicznej emitentów z rynków regulowanych. Autorzy wskazują, że zazwyczaj podczas IPO akcje są niedowartościowane (Baron, 1982: 955–976; Levis, 1990: 76–89; Ritter, 1987: 269–282).

Na polskim rynku także przeważają badania dotyczące niewłaściwego oszacowania emisyjnej akcji na rynku regulowanym. Briston i Jelic (2003: 457–484) wykazali niedowartościowanie (*Underpricing*) na poziomie 27,4% dla IPO z okresu 1991–1999. Obserwacje dla kolejnych lat wskazują niższy poziom niedoszacowania. Średnie niedowartościowanie dla pierwszych ofert publicznych przeprowadzonych w latach 2005–2009 zostało oszacowane na poziomie 15,7% (Cornanic i Novak, 2013: 307–335).

Zjawisko IPO *Underpricing* na rynku NewConnect zostało potwierdzone w badaniach m.in. Frydrych (2022: 77–92), Fijałkowskiej i in. (2013: 267–276) oraz Zasepy (2013: 285–293). Natomiast w literaturze dotyczącej wykluczenia spółek z rynku NewConnect badania były prowadzone m.in. przez Buszko i Kołosowską (2013: 492–502) oraz Zygmantowskiego (2015: 109–126), którzy wnioskują, iż zmiana rynku notowań korzystnie wpływa na wzrost płynności akcji. Przy czym maksymalizacja wartości i utrzymanie płynności są głównymi celami funkcjonowania przedsiębiorstwa (Bolek i in., 2021: 7–24).

Wykluczenie z obrotu, obok zawieszenia, upomnienia oraz kary finansowej stanowi sankcję, którą otrzymywały spółki od za nieprzestrzeganie przepisów Regulaminu ASO (Regulamin Alternatywnego Systemu Obrotu, §12). Średnia liczba dni od nałożenia kary finansowej przez organizatora ASO do wykluczenia spółki z obrotu na rynku NewConnect wynosiła 259 dni (Frydrych, 2021: 456–469).

Frydrych (2021: 161–178) podkreśla, iż dominuje udział wykluczonych spółek, których debiuty zostały odnotowane w pierwszych pięciu latach funkcyjono-

wania rynku NewConnect. Wśród przyczyn delistingu spółek z rynku NewConnect wymienia bezpieczeństwo obrotu, przeniesienie na Główny Rynek GPW oraz upadłość likwidacyjną. Przy czym, ponad 80% spółek, które zmieniły parkiet notowań nie została wykluczona w kolejnych latach z obrotu na Głównym Rynku GPW. Według Mosionek-Szwedy (2013: 148–149) debiut spółki w ASO należy postrzegać jako korzyść, gdyż przyczynia się do transferu spółki z NewConnect na rynek regulowany, jednak jest także związany z kosztami dotyczącymi debiutu oraz obecności spółki na Głównym Rynku GPW. Chociaż w przeprowadzonym badaniu ankietowym przez Sliwińskiego i Woźniak (2021: 151–167) większość spółek ocenia już koszty funkcjonowania na rynku NewConnect za zbyt wysokie.

## **2. MATERIAŁ I METODYKA BADAŃ**

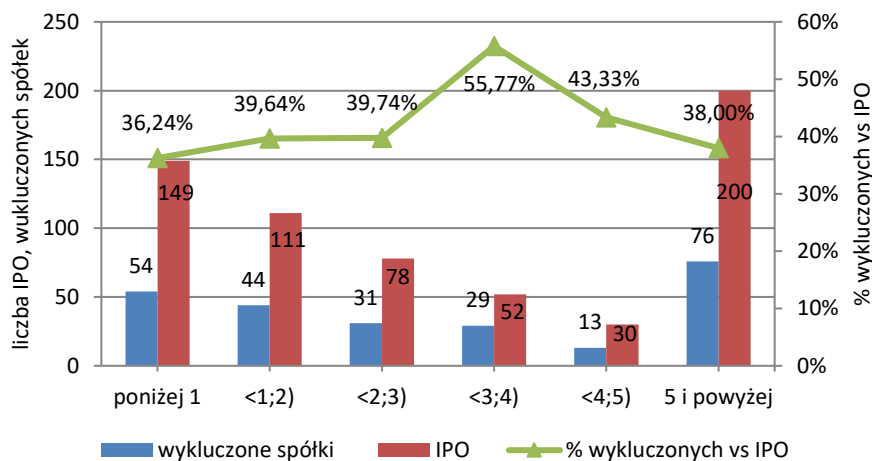
Autor dokonał analizy liczby debiutów oraz wykluczeń spółek z NewConnect w latach 2007–2020. Ponadto sprawdzono przyczyny wykluczenia podmiotów, w zależności od kształtowania się ceny emisyjnej w porównaniu z ceną w dniu debiutu.

Mając na uwadze powyższe, zbadano przyczyny wykluczenia spółek z NewConnect, których pierwsza oferta publiczna była przewartościowana, jak również niedowartościowana. Analizę przeprowadzono według przyjętego przez Autora kryterium tj. ceny emisyjnej akcji. Ponadto zastosowano przedziały co 1 zł, zwracając uwagę na tzw. spółki „groszowe”, tj. o cenie emisyjnej akcji poniżej 1 zł, jak również na podmioty, których papiery wartościowe debiutowały z ceną 5 zł i powyżej (tj. spółki, których cena emisyjna akcji była zbliżona do równowartości 1 EUR). W badaniu wykorzystano dane pochodzące z roczników giełdowych GPW oraz dane dotyczące statystyk z rynku NewConnect. W procesie badawczym autor wykorzystał, oprócz analizy literatury i aktów prawnych, metodę obserwacji, analizę danych źródłowych oraz metodę dedukcji.

## **3. WYNIKI BADAŃ**

W latach 2007–2020 z obrotu na NewConnect wycofano 247 spółki, co stanowi to 38,83% spółek, których papiery wartościowe zostały wprowadzone na ten rynek.

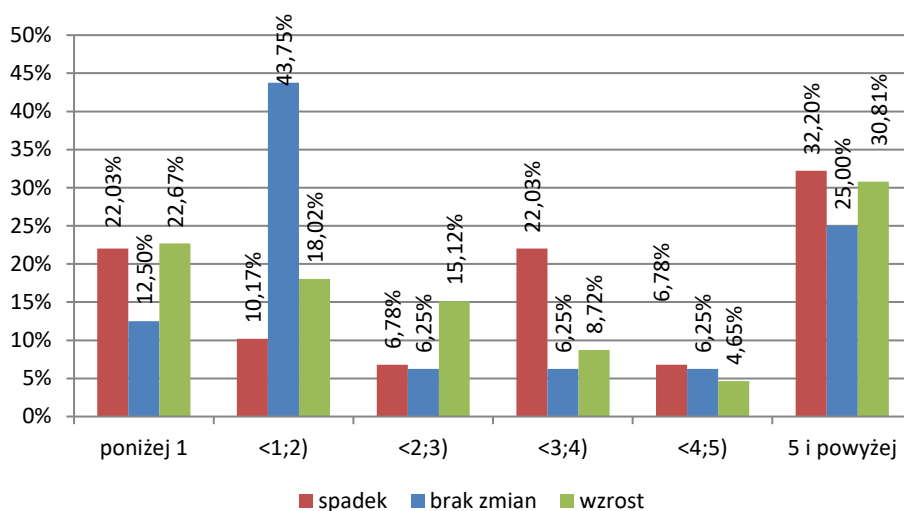
Udział wykluczonych podmiotów z obrotu na rynku zorganizowanym przez GPW w formule ASO został zaprezentowany na wykresie 2. Największy odsetek, tj. 55,77%, wycofanych spółek, w odniesieniu do liczby przeprowadzonych IPO, posiadało cenę emisyjną papierów wartościowych z przedziału <3;4), podczas gdy najniższy tj. 36,24% tzw. spółki groszowe. Biorąc pod uwagę cenę emisyjną akcji 5zł i powyżej, gdzie odnotowano największą liczbę pierwszych ofert publicznych, należy stwierdzić, iż co trzecia spółka została wykluczona z NewConnect.



Wykres 2. Liczba IPO, wykluczonych spółek z NewConnect (w szt., w zł)

Źródło: opracowanie własne na podstawie Roczników Giełdowych (www1).

Wyniki badań dotyczące zmiany ceny akcji podczas IPO według wysokości ceny emisyjnej zostały przedstawione na wykresie 3. Spośród wykluczonych 59 podmiotów, których cena emisyjna podczas pierwszej oferty publicznej była wyższa niż na koniec dnia debiutu, największy udział stanowią spółki z ceną emisyjną akcji 5 zł i powyżej. Natomiast wśród 172 wykluczonych spółek, które odnotowały wzrost ceny akcji na koniec dnia debiutu porównując z ceną emisyjną, również przeważają podmioty, których cena emisyjna papierów wartościowych wynosiła co najmniej 5 zł. Spośród emitentów, których cena papierów wartościowych nie uległa zmianie na koniec dnia debiutu przeważają spółki, których cena emisyjna akcji wynosiła co najmniej 1 zł, lecz poniżej 2 zł. Natomiast wśród akcji, które cechują się najmniejszą zmianą ceny emisyjnej w stosunku do notowań na koniec dnia debiutu, należy wymienić dla przewartościowanych IPO instrumenty finansowe posiadające cenę emisyjną z przedziału <2;3) oraz <4;5). Natomiast dla IPO niedowartościowanego papiery wartościowe, które posiadały cenę emisyjną wynoszącą co najmniej 4 zł, ale poniżej 5 zł. Zatem poziom wycofanych spółek z obrotu, według ceny emisyjnej ich akcji, jest zbliżony dla IPO niedowartościowanego, jak również przewartościowanego.



Wykres 3. Zmiana ceny akcji w dniu debiutu według wysokości ceny emisyjnej (w %)

Źródło: opracowanie własne na podstawie Roczników Giełdowych (www1).

W tabeli 1 zamieszczono determinanty wykluczenia spółek w zależności od zmian ceny emisyjnej akcji w stosunku do jej ceny na koniec pierwszego dnia notowań.

Tabela 1. Przyczyny wykluczenia spółek z NewConnect w latach 2007–2020 (w szt.) według zmiany ceny akcji w dniu debiutu

Przyczyna wykluczenia	Zmiana ceny akcji w dniu debiutu		
	spadek	brak zmian	wzrost
Przeniesienie na Główny Rynek GPW	22	5	44
Bezpieczeństwo obrotu	12	6	47
Upadłość likwidacyjna	11	1	43
Zniesienie dematerializacji akcji	5	1	18
Nieprzestrzeganie zasad obrotu	2	2	6
Fuzja	4	0	4
Decyzja KNF	1	1	7
Na wniosek emitenta	2	0	3

Źródło: opracowanie własne na podstawie Roczników Giełdowych (www1).



Spółki, które dotyczy zjawisko niedowartościowania pierwszej oferty publicznej, stanowią 69,64% w podmiotach wycofanych z obrotu na NewConnect. Natomiast akcje 23,89% wycofanych podmiotów w latach 2007–2020 były przewartościowane. Najczęściej przyczyną wykluczenia spółek z NewConnect jest przeniesienie na Główny Rynek GPW, bezpieczeństwo obrotu oraz upadłość likwidacyjna. W przypadku każdej przyczyny wykluczenia, oprócz fuzji, dominują spółki, których pierwsza oferta publiczna była niedowartościowana.

W tabeli 2 zaprezentowano udział notowanych oraz wycofanych spółek z obrotu według podziału przyczyn, który został zaproponowany przez Macey et al. (2008: 683–713). Wyniki przedstawiono według zmiany ceny zamknięcia w pierwszym dniu notowań akcji w odniesieniu do ceny emisyjnej.

Tabela 2. Notowane oraz wycofane spółki z NewConnect według zmiany ceny akcji w dniu debiutu (w %)

Zmiana ceny akcji w dniu debiutu spółki na NewConnect	Notowana	Wycofana	
		dobrowolnie	przymusowo
Spadek	59,86	22,45	17,69
Brak zmian	69,81	11,32	18,87
Wzrost	59,05	16,43	24,52

Źródło: opracowanie własne na podstawie Roczników Giełdowych (www1).

Spośród podmiotów, których pierwsza oferta publiczna była właściwie wyceniona, najwyższy, tj. 69,81%, jest udział spółek, które nie zostały wycofane z obrotu. Natomiast udział notowanych spółek, których cena emisyjna na koniec dnia debiutu była niższa oraz podmiotów, których akcje były niedowartościowane jest zbliżony i wynosi odpowiednio 59,86% oraz 59,05%. Ponadto analizując przewartościowane IPO, to w tej grupie emitentów dobrowolne przyczyny wycofania stanowią udział 22,45%. Natomiast wśród niedowartościowanych IPO przeważa udział przymusowo wykluczonych podmiotów, który wynosi 24,52%. Warto zaznaczyć, że zarówno dla spółek niedowartościowanych i przewartościowanych łączny udział wykluczeń dobrowolnych i przymusowych jest zbliżony.

Następnie zweryfikowano liczbę spółek, w podziale na przyczyny wykluczenia dobrowolne i przymusowe, wykluczonych z NewConnect według zmiany ceny akcji w dnia debiutu. Analiza została przeprowadzona według ceny emisyjnej (tabela 3).



Tabela 3. Przyczyny wykluczenia spółek z NewConnect według zmiany ceny akcji w dniu debiutu a cena ich emisyjna (w szt.)

Cena emisyjna	Przyczyny wykluczenia spółki z NewConnect					
	dobrowolne			przymusowe		
	spadek	brak zmian	wzrost	spadek	brak zmian	wzrost
Poniżej 1	6	.	10	7	2	29
<1;2)	2	4	10	4	3	21
<2;3)	2	.	14	2	1	12
<3;4)	7	.	3	6	1	12
<4;5)	4	.	2	.	1	6
5 i powyżej	12	2	30	7	2	23

Źródło: opracowanie własne na podstawie Roczników Giełdowych (www1).

Biorąc pod uwagę przyczyny usunięcia spółek z rynku NewConnect to 56,28% podmiotów zostało wykluczonych przymusowo przez organizatora ASO. Wśród spółek wycofanych dobrowolnie z rynku NewConnect w latach 2007–2020 przeważały podmioty, których akcje były niedowartościowane w dniu debiutu. Przy czym, w tej grupie 43,47% papierów wartościowych posiadało cenę emisyjną wynoszącą 5 zł i więcej.

Rozważając przymusowe przyczyny wykluczenia spółki z rynku NewConnect przeważają podmioty, których papiery wartościowe posiadały cenę emisyjną poniżej 1 zł – 27,33%. Wśród spółek „groszowych” główny powód delistingu to przymusowe wykluczenie z NewConnect, wynikające m.in. z naruszenia zasad bezpieczeństwa obrotu oraz upadłość likwidacyjna. Udział spółek przymusowo wykluczonych z obrotu, które wyemitowały akcje o cenie emisyjnej 5 zł i powyżej jest zbliżony, tj. 23,02%. Warto podkreślić, iż w przypadku spółek obligatoryjnie wykluczonych z NewConnect, dla każdego przedziału ceny emisyjnej, dominują podmioty, których papiery wartościowe były niedowartościowane w dniu debiutu.

## PODSUMOWANIE

Celem opracowania była analiza ceny emisyjnej w stosunku do ceny akcji na koniec pierwszego dnia notowania wobec przyczyn wykluczenia spółek z rynku NewConnect w latach 2007–2020. W wyniku przeprowadzonych badań stwierdzono, że 39,84% spółek, które zadebiutowały na rynku NewConnect w latach 2007–2020, zostało wykluczonych z obrotu. Ponadto 69,64% spółek, które zostały wykluczone z obrotu na NewConnect, w dniu debiutu odnotowało wzrost

ceny akcji w stosunku do ich ceny emisyjnej. Dotyczy to zarówno przewartościowania, jak i niedowartościowania IPO. Badania prowadzone przez Frydrych (2022: 77–92), Fijałkowską i in. (2013: 267–276) oraz Zasępe (2013: 285–293) także potwierdzają zjawisko niedowartościowania pierwszej oferty publicznej na rynku NewConnect.

Na podstawie otrzymanych wyników zweryfikowano pozytywnie przyjętą hipotezę. Spółki, których cena emisyjna akcji nie została właściwie oszacowana, były częściej wycofywane z NewConnect w stosunku do podmiotów, których cena papierów wartościowych w dniu debiutu nie uległa zmianie. Jednakże poziom wycofanych spółek, których pierwsza oferta publiczna była przewartościowana oraz niedowartościowana, jest zbliżony.

Badanie dowodzi, że wśród przewartościowanych IPO przeważa udział dobrowolnych przyczyn wycofania, podczas gdy wśród niedowartościowanych jest wyższy udział przymusowo wykluczonych podmiotów. Natomiast wysokość ceny emisyjnej, według przyjętych w badaniu przedziałów, nie stanowi przesłanki wycofania spółek z rynku NewConnect.

W literaturze przedmiotu rzadko można znaleźć opracowania dotyczące relacji pomiędzy rynkową wyceną w dniu debiutu spółki a jej przesłankami wycofania z notowań w alternatywnym systemie obrotu. Relacja ceny zamknięcia pierwszego dnia notowań akcji do ceny emisyjnej nie może zostać uznana za rozstrzygający wyznacznik analizy przyczyn wykluczenia spółek z obrotu. Jednakże podobne badania powinny zostać prowadzone także dla rynku regulowanego, jak również dla innych przedziałów ceny emisyjnej.

## BIBLIOGRAFIA

- Algebaly, E.-A. M., Ibrahim, Y. and Ahmad-Zaluki, N.A. (2014). The determinants of involuntary delisting rate in the Egyptian stock market. *Review of Accounting and Finance*, 13(2). <https://doi.org/10.1108/RAF-04-2012-0035>.
- Bakke, T.-E., Jens, C. and Whited, T. (2012). The real effects of delisting: Evidence from a regression discontinuity design. *Finance Research Letters*, 9(4). <https://doi.org/10.1016/j.frl.2012.08.002>.
- Ball, R. and Shivakumar, L. (2008). Earnings quality at initial public offerings. *Journal of Accounting and Economics*, 45(2–3). <https://doi.org/10.1016/j.jacceco.2007.12.001>.
- Bancel, F. and Mittoo, U.R. (2009). Why do European firms go public? *European Financial Management*, 15. <https://doi.org/10.1111/j.1468-036X.2009.00501.x>.
- Baron, D.P. (1982). A Model of the Demand for Investment Banking Advising and Distribution, Services for New Issues. *Journal of Finance*, 37. <https://doi.org/10.2307/2327760>.
- Beaver, W., McNichols, M. and Price, R. (2007). Delisting returns and their effect on accounting based market anomalies. *Journal of Accounting and Economics*, 43(2). <https://dx.doi.org/10.2139/ssrn.2412547>.

- Bessler, W., Kaen, F., Kurmann, P. and Zimmermann, J. (2012). The listing and delisting of German firms on NYSE and NASDAQ: Were there any benefits? *Journal of International Financial Markets, Institutions and Money*, 22(4). <https://doi.org/10.1016/j.intfin.2012.01.001>.
- Bessler, W., Beyenbach, J., Rapp, M.S. and Vendrasco, M. (2022). Why do firms down-list or exit from securities markets? *Review of Managerial Science*, Working paper. <https://doi.org/10.1007/s11846-022-00554-4>.
- Bharath, S.T., Dittmar, A.K. (2010). Why do firms use private equity to opt out of public markets? *Review of Financial Studies*, 23. <https://doi.org/10.1093/rfs/hhq016>.
- Bhabra, H. and Pettway, R. (2003). IPO prospectus information and subsequent performance. *Financial Review*, 38(3). <https://doi.org/10.1111/1540-6288.00051>.
- Bolek, M., Pluskota, A. and Wolski, R. (2021). Liquidity – Profitability Trade-Off on the Example of Companies Listed on Main and Alternative New Connect Markets on Warsaw Stock Exchange. *Finanse i Prawo Finansowe*, 4(28). <https://doi.org/10.18778/2391-6478.4.28.02>.
- Briston, R. and Jelic, R. (2003). Privatisation Initial Public Offerings: The Polish Experience. *European Financial Management*, 9(4). <https://doi.org/10.1111/1468-036X.00232>.
- Buszko, M. and Kołosowska, B. (2013). Przechodzenie spółek z alternatywnego systemu obrotu NewConnect na rynek regulowany GPW – cele, uwarunkowania, efekty. *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Ekonomiczne Problemy Usług*, 102.
- Clyde, P., Schultz, P. and Zaman, M. (1997). Trading Costs and Exchange Delisting: The Case of Firms That Voluntarily Move from the American Stock Exchange to the Nasdaq. *The Journal of Finance*, 52(5). <https://doi.org/10.1111/j.1540-6261.1997.tb02753.x>.
- Cornanic, A. and Novak, J. (2015). Signaling by Underpricing the Initial Public Offerings of Primary Listings in an Emerging Market. *Czech Journal of Economics and Finance*, 65(4).
- DeAngelo, H., DeAngelo, A. and Rice, E. (1984). Going private: minority freeze outs and stockholder wealth. *Journal of Law and Economics*, 27.
- Dewenter, K., Kim, C.-S. and Novaes, W. (2010). Anatomy of a regulatory race to the top: Changes in delisting rules at Korea's two stock exchanges, 1999–2002. *Journal of Corporate Finance*, 16(4).
- Engelen, P.-J., Meoli, M., Signori, A. and Vismara, S. (2020). The effects of stricter regulation on the going public decision of small and knowledge-intensive firms. *Journal Business Finance & Accounting*, 47. <https://doi.org/10.1111/jbfa.12417>.
- Fijałkowska, D., Muszyński, M. and Pauka, M. (2013). Zjawisko undeprecingu na rynku NewConnect. *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Finanse. Rynki Finansowe. Ubezpieczenia*, 766(62).
- Frydrych, S. (2021). Przyczyny wykluczenia spółek z rynku NewConnect. *Studia Prawno-Ekonomiczne, CXX*. <https://doi.org/10.26485/SPE/2021/120/9>.
- Frydrych, S. (2021). Sanctions as a Mechanism Disciplining Issuers on the NewConnect Market. *European Research Studies Journal*, XXIV(3B). <https://doi.org/10.35808/ersj/2475>.

- Frydrych, S. (2022). IPO Underpricing a wysokość ceny emisyjnej na rynku NewConnect. *Studia Prawno-Ekonomiczne*, CXXIII. <https://doi.org/10.26485/SPE/2022/123/5>.
- Kim, W. and Weisbach, M.S. (2008). Motivations for public equity offers: An international perspective. *Journal of Financial Economics*, 87.
- Kooli, M. and Mekkassi, S. (2007). The survival of US IPO issuers: 1985–2005. *Journal of Wealth Management*, 10(2).
- Leuz, C., Triantis, A. and Wang, T.Y. (2008). Why do firms go dark? Causes and economic consequences of voluntary SEC deregistrations. *Journal of Accounting & Economics*, 45.
- Levis, M. (1990). The Winner's Curse Problem, Interest Costs, and the Underpricing of Initial Public Offerings. *Economic Journal*, 100.
- Loughran, T. and Ritter, J.R. (1995). The new issues puzzle. *Journal of Finance*, 50(1). <https://doi.org/10.1111/j.1540-6261.1995.tb05166.x>.
- Macey, J., O'Hara, M. and Pompilio, D. (2008). Down and out in the stock market: the law and economics of the delisting proces. *Journal of Law and Economics*, 51(4). <https://dx.doi.org/10.1086/593386>.
- Martinez, I. and Serve, S. (2016). Reasons for delisting and consequences: A literature review and research agenda. *Journal of Economic Surveys*, 31(3). <https://doi.org/10.1111/joes.12170>.
- Mosionek-Schweda, M. (2013). Koszty i korzyści transferu spółki z NewConnect na rynek regulowany GPW SA. *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Finanse, Rynki Finansowe, Ubezpieczenia*, 736.
- Pagano, M., Panetta, F. and Zingales, L. (1998). Why do companies go public? An empirical analysis. *Journal of Finance*, 53. <https://doi.org/10.1111/0022-1082.25448>.
- Pour, E.K. and Lasfer, M. (2013). Why do companies delist voluntarily from the stock market? *Journal of Banking and Finance*, 37(12), <https://doi.org/10.1016/j.jbankfin.2013.08.022>.
- Regulamin Alternatywnego Systemu Obrotu, wraz z załącznikami, w brzmieniu przyjętym Uchwałą Nr 147/2007 Zarządu Giełdy z dnia 1 marca 2007 r., z późn. zm.
- Ritter, J.R. (1987). The Costs of Going Public. *Journal of Financial Economics*, 19.
- Ritter, J.R. (1991). The long-run performance of initial public offerings. *Journal of Finance*, 46(1). <https://doi.org/10.1111/j.1540-6261.1991.tb03743.x>.
- Sanger, G. and Peterson, J. (1990). An empirical analysis of common stock delistings. *Journal of Financial and Quantitative Analysis*, 25(2). <https://doi.org/10.2307/2330828>.
- Śliwiński, P. and Woźniak, S. (2021). Koszty obecności spółki na rynku NewConnect i ich postrzeganie przez emitentów. *Ruch Prawniczy, Ekonomiczny i Socjologiczny*, 83(4). <https://doi.org/10.14746/rpeis.2021.83.4.11>.
- Teoh, S.H., Welch, I. and Wong, T.J. (1998). Earnings management and the long-run market performance of initial public offerings. *The Journal of Finance*, 53(6). <https://doi.org/10.1111/0022-1082.00079>.
- Ustawa z dnia 29 lipca 2005 r. o ofercie publicznej i warunkach wprowadzania instrumentów finansowych do zorganizowanego systemu obrotu oraz o spółkach publicznych Dz.U. 2005, nr 184, poz. 1539.

- You, L., Parhizgari, A. and Srivastava, S. (2012). Cross-listing and subsequent delisting in foreign markets. *Journal of Empirical Finance*, 19(2), <https://doi.org/10.1016/j.jempfin.2011.11.005>.
- Yung, C., Çolak, G. and Wang, W. (2008). Cycles in the IPO market. *Journal of Financial Economics*, 89(1). <http://dx.doi.org/10.2139/ssrn.972429>.
- Zasępa, P. (2013). Wpływ ceny nominalnej akcji na niedowartościowanie pierwszej oferty publicznej na rynku NewConnect. *Prace Naukowe Akademii im. Jana Długosza w Częstochowie. Pragmatates Oikonomias*, 7.
- Zygmantowski, P. (2015). Wpływ zmiany rynku notowań na spółki publiczne w Polsce. *Studia i Prace Kolegium Zarządzania i Finansów SGH*, 144. (www1) [www.gpw.pl](http://www.gpw.pl) [dostęp 02.12.2021].

Zakończenie recenzji/ End of review: 24.10.2022

Przyjęto/Accepted: 13.11.2022

Opublikowano/Published: 23.11.2022.



## UNETHICAL ADVERTISING PRACTICES IN THE FINANCIAL MARKET AND COUNTERACTION TOOLS

Zofia M. Mazur\*



<https://doi.org/10.18778/2391-6478.4.36.03>

### Abstract

**The purpose of the article/hypothesis.** Paper highlights certain crucial aspects of misleading and deceitful advertisements of banking and financial products and services, its effects, and the necessity to ban and/or restrict some of professionals' misbehaviours. Many research evidence shown how an endless amount of information and specific advertisements can influence consumers' financial decision-making. This concern was intensified by the impact of COVID-19 on the financial situation of many households. **Methodology.** Author has conducted extensive research using national and international literature, public reports, legal cases, administrative proceedings, national and international legislations. There are presented some national examples, good principles and suggestions of what should be done to better protect the customers on the banking and financial market. **Results of the research.** The study revealed that the misleading, abusive conducts and numerous sales strategies of professionals operating on the markets at issue may regard almost any individual. Unethical advertising practices may intensify because of ever-increasing technology and new advertising techniques. As described, both the type and the timing of the advertising can also greatly influence consumers' choice. The policy makers shall be determined, decisive and fast in order to assure that financial products and services are safe and law-compliant, to raise standards in advertising sector, to prevent defaults, irresponsible borrowing, loss of privacy, discrimination, failures and predatory practices. The measures shall prevent the frauds and the marketing and sales strategies of a set of unrealizable promises or products unsuited to the needs of customers on the financial advertising market.

**Keywords:** financial advertising, financial consumer protection, advertising restrictions, small-dollar loans, advertising good practices.

**JEL Class:** K20, K23, K42, M37, M38.

\* Ph.D. candidate of Law and Protection University of Rome "Tor Vergata", e-mail: [zofiamaria.mazur@studio.unibo.it](mailto:zofiamaria.mazur@studio.unibo.it)  
<https://orcid.org/0000-0002-0493-1545>

## INTRODUCTION

The advertising of banking and financial products and services represents a sector which highlights and generates several consumers' vulnerabilities. In times of global pandemic and ongoing war, such sector is susceptible to become particularly dangerous. Due to the increasing poverty and financial hardship of many households, the demand for financial products and services significantly grows. In the light of these particular circumstances, numerous potential risks may arise that can highly influence the financial future of many consumers.

We can easily imagine that the financial consequences of the acquisition of an unnecessary or wrong toothbrush or a frozen pizza are significantly different from those related to a high-cost loan, a high-risk investment product or a complex cryptocurrency financial service. Thus, the lack of sufficient awareness, financial illiteracy or other fundamental elements can be costly, as well as the violation of legal norms and regulatory requirements by financial institutions and advertising providers.

For these reasons, the author analyses how an endless amount of information and specific advertisements can influence consumers' financial decision-making. In addition, there are presented some suggestions of what should be done or improved in order to prevent the marketing and sales strategies of a set of unrealizable promises or products unsuited to the needs of customers.

### 1. THE ADVERTISING IMPACT "IMMUNITY"

The Financial Services Consumer Panel stressed a potential consumer harm related to "digital advertising of financial services and the use of advertising technology or 'adtech' to create" individual and personalized consumers' profiles. They noted that such techniques are able to "create an environment for discrimination, manipulation and exploitation" (Financial Services Consumer Panel, 2020).

It is already well-known that advertising heavily influences consumers when making purchasing decisions. We are also aware that, because of the different values of products and services available on the market, some of such decisions can assume more (or less) relevance than others.

Many people believe they are immune to the influence of advertising messages<sup>1</sup>, nevertheless several scholars and studies confirm that adverts can be very persuasive working below the conscious awareness, and therefore they can have a great impact also on the "immune" ones.

---

<sup>1</sup> As well as, in more general terms, "people tend to think they are invulnerable. They expect others to be victims of misfortune, not themselves. Such ideas imply not merely a hopeful outlook on life, but an error in judgment that can be labeled *unrealistic optimism*" (Weinstein, 1980: 806).



Moreover, Nagler (1993: 360) pointed out that “consumers do not always make decisions as carefully as economists assume: sometimes they make intuitively, rendering themselves vulnerable to the deception of advertisers and other salesman”.

Lastly, increasing competitiveness and knowledge among society obligate banks and other financial institutions to adopt numerous sales strategies to remain in business. Several financial entities, in order to reach new clients and attract their savings, implement various aggressive, abusive and unethical techniques which in many cases constitute unlawful and dangerous conducts highly detrimental to the costumers.

## **2. ADVERTISING INFLUENCE**

Generally, in an average banking relationship, the advertisements constitute a first step between a financial institution and its clients and potential clients. Professionals use advertisements in order to attract consumers to a particular product or service, highlighting just the most attractive side of a product’s key features.

The power of advertising to influence the customers’ purchase decisions is incredibly incisive, especially in the Digital Era, where the ads are placed laterally everywhere. Advertising “surrounds us no matter where we turn, intruding into out communication media, our streets, and our very homes. It is designed to attract attention, to be readily intelligible, to change attitudes, and to command our behavior” (Pollay, 1986: 18).

Moreover, as it has been noted by Nair (2020: 1) “an advertisement can make either a rational appeal or an emotion appeal. Advertisements using rational appeal try to influence consumers by providing information about and advantages of the product concerned while advertisements using emotional appeal focus on the emotional side of using the product and feel of the product”.

Nonetheless, modern advertisements appeal more to emotion rather than to reason, attempting, firstly, to “seduce” consumers and only after that they tend to receive their rational submission.

Furthermore, the advertisings seek to promote self-doubt rather than self-confidence, creating more needs than satisfaction. They generate the false perception that consumption can be a cure to the unhappiness and various personal and professional failures. The issue is too important to be ignored or tolerated. And in the pandemic situation it has become even more relevant, because the consumers are at their heightened vulnerability due to the “COVID-19 crisis”.

Consequently, the rule of self-limitation and self-regulation (cited above) may appear not only insufficient or unsuccessful, but it can also become highly inadequate.

In addition, the rapid expansion of the financial products/services and the advertising industry makes these sectors very complex<sup>2</sup> to consumers, and thus dangerous, especially in these particularly arduous economic times. Therefore, consumers should be protected against unfair, deceitful or misleading practices of advertising and should be able to compare different offers available on the market (Recital 37 of Directive 2014/17/EU: 34–85). Moreover, the information given to consumers shall be streamlined and reflect the growing use of digital devices.

For this reason, care should be taken to guarantee appropriate regulations, restrictions, strong supervision (including the use of technology<sup>3</sup>) and enforcement provided by competent authorities in order to protect consumers and prevent deceitful, misleading, false, unlawful, unethical and unfair comparative<sup>4</sup> advertising.

On the one hand, there must be assured the protection of consumers against misselling of financial products/services (more information: Mazur, 2021) and practices of predatory selling and marketing, and on the other hand the governs must prevent also the dangerous Moral Hazard of banks and other financial institutions which is susceptible to trigger their defaults, and consequently the public financial scandals.

The public governance must safeguard the trust in financial system, guarantee the stability, integrity, and good functioning of the public economy and administration, as well as the fair competition on the market<sup>5</sup>. In this regard, a certain normative, legally binding standards should be set. However, they should not be neither too strong nor too weak. The overprotection may encourage “mental laziness in the consumer” (Attas, 1999: 56) leading to the potential abuses by consumers of their *status* of weaker party in the contractual relationships with professionals<sup>6</sup>. Moreover, “an overprotective standard also fails to treat the consumer with the respect due to an autonomous subject” (Attas, 1999: 56). Consumers should be responsible for their own mistakes and pay the price for their errors.

---

<sup>2</sup> On the one hand, incomplete information may be detrimental to the customers leading to many poor, uninformed or inadequate purchase decisions, but on the other hand, too much, too complex or too detailed information could be confusing and overwhelming.

<sup>3</sup> It means SupTech which consists of the use of the technology by supervisory organs in order to make the supervisory system more effective, flexible and responsive and RegTech as well.

<sup>4</sup> In accordance with Article 2 of the Directive 2006/114/EC: 21–27, “comparative advertising means any advertising which explicitly or by implication identifies a competitor or good or services offered by competitor”. See also: Art. 4 of the Directive.

<sup>5</sup> Although the present paper is focused primarily on the protection of consumers’ economic interests, it must be kept in mind that unfair advertising indirectly also harms the economic interests of legitimate competitors (Recital 6 of the Directive 2005/29/EC: 22–39).

<sup>6</sup> For a more accurate analysis of the abuse of a *status* of a weaker party by consumers, see: Mazur (2022a).

### 3. DIFFERENT KINDS OF ADVERTS

As it has been already mentioned, advertising is a key component in the marketing of financial products and services that enable financial entities the publication, promotion and sale of their offered products to a wide audience, often beyond the targeted market. Through adverts professionals try to draw customers' attention on their most recent and/or attractive commercial offer.

Many studies have shown that the advertisements can significantly influence the consumer's process of decision-making, through intensive persuasion reducing people in the role of irrational consumers (MacBride, 1980).

The financial adverts may assume many different forms. They can consist of a simple text, be accompanied by pictures and/or video and/or audio. They can be placed online<sup>7</sup>, in television<sup>8</sup>, on the radio, in press, on the social networks, on the screens of the mobile devices, on the billboards, on the t-shirts, shorts and other pieces of sport clothes, on the moving vehicles (such as public transport) and sport vehicles (i.e., Formula 1), on the football, basketball, tennis and any other sport camp, in the cinema, on the tickets, leaflets, and so on. Nowadays, ads can be incorporated into almost everything. As it has been reported by the President of the Polish Office of Competition and Consumer Protection, ads can illegally use the image of celebrities in order to mislead or deceive consumers to invest their savings in highly risky financial products or services (see: [www1](http://www1)).

Some of the advertising techniques may be particularly annoying and invasive, especially when the messages and other promotional practices are unsolicited<sup>9</sup>, continuous and difficult to avoid.

They can be targeted and personalised to specific groups of consumers, based on the age, gender, nationality, religion, incomes, preferences, consumption habits, employment, ZIP Code, financial experience, education level and so forth.

The practices of personalisation and targeting very often depend on artificial intelligence and automated decision-making that keep track of consumer behaviours, preferences and location. The objective is to focus the clients' attention on particular products and their characteristics. However, consumers should be aware of the broad range of products and services available and not only of some specific ones.

<sup>7</sup> As stated by the BEUC (2010: 3) "The Internet has turned out to be a true gold mine for advertisers".

<sup>8</sup> According to the British Office of Communications report from 2020, in the U.K. the television advertising totalled £4.5 bn in 2019, down from £4.8bn in 2018. The continued growth of online advertising is still very visible, which increased from £13.9bn to £15.7bn.

<sup>9</sup> " [In] Belgium, unsolicited marketing is strictly regulated – it is forbidden, among others, to set up credit sales desks in public places such as railway stations, shopping centers" (FSUG, 2019: 11).

The situation becomes even worse when adverts are targeted on vulnerable group of consumers. In fact, several researchers found out that many television advertisements are targeted at people without job and short of money (BIS, 2013).

They can appear on specific tv channels, such as gambling channels, lottery, horse racing, astrology, teleshopping channels and so forth. In this manner they might constitute a temptation in front of televiewer who may consider the opportunity to borrow some money. It could be almost like putting alcohol in front of an alcohol addict.

The intent of the advertising is to make available goods or services desired by consumers and make them considered as “the path to happiness and the solution to virtually all problems and needs” (Pollay, 1986: 21).

And in these specific cases, the particular attention should be paid on unsecured financial products/services, such as small-dollar loans which are short-term, high-cost, easily and quickly to obtain<sup>10</sup>. These two last characteristics (which make loans particularly dangerous) are viewed favourable and considered a key advantage by borrowers, especially those in need. Thus, we can imagine that the final result may be tragic, leading to addictive consumption, risky spiral of debts, financial hardship, over-indebtedness, shame, family troubles, ever-rising number of suicides, public disorders and crimes.

Moreover, it must be kept in mind, that the fact that consumers do not pay for the advertised content it does not mean that they get information for free. In the online environment “web users are paying for content indirectly through the data that they, often unknowingly, supply to advertisers” (BEUC, 2010: 3).

There is another problem of Data Collection, as reported by Wall Street Journal “high-cost lenders also buy data on Facebook users who have been identified as people in financial distress from third-party companies that compile the information without Facebook’s involvement. Chicago-based Exact Data sells marketing list titled *People Struggling With Bills and Get Me Out of Debt!* that purport to offer millions of Facebook address for struggling consumers. The price is as little as \$249 for more than 10 million names” (www2).

### **3.1. Some selected examples of regulations on advertising and marketing of financial products**

#### **a) National legally binding regulations**

In many countries particular competent authorities supervise and enforce legally binding regulations related to the financial advertising.

In **Spain** the competent authority which supervises the financial advertising is the *Banco de Espana*. The Spanish regulatory model is based on the

---

<sup>10</sup> For more detailed information see: Mazur (2022b); Miller Jr. (2019).

responsibility of the professionals who place the adverts and on the *ex post* control of the advertising activity conducted by the *Banco de Espana*. On June 26, 2020 the Bank of Spain published a new Circular No. 4/2020 on advertising of banking products and services. In addition, there are other rules that govern the specific aspect of financial product advertising, such as Law n. 16 of 24 June 2011 on consumer loan agreements or the Order ECC/2316 of 4 November 2015 on information obligations and classification of financial products.

The Polish Competition Authority (UOKiK)<sup>11</sup>, the Italian Competition Authority (AGCM)<sup>12</sup>, the Italian Authority for Communications Guarantees (AGCOM).

In **Australia** there is the Australian Securities and Investment Commission (ASIC) which regulates and supervise the sector of financial advertising. The Australian regulator in 2012 issued a “Good Practice Guidance” (Regulatory Guide 234) that contains all the information, advice and guidelines for advertisers of financial products and services, however, with no legally binding character. The Australian Competition and Consumer Commission (ACCC) governs the content of television commercials and advertising generally.

In the **United Kingdom** the competent organs are:

- the Financial Conduct Authority which regulates advertising for most financial products and services, such as loans, investments, cash saving and bank accounts, pension, mortgages, payment services and e-money, and so forth. The FCA issues and enforces various rules and guidance<sup>13</sup>;
- the Advertising Standards Authority (ASA) – the UK’s independent advertising regulator which controls advertisements across UK media. The ASA monitors ads and conducts research both on its own initiative and after receiving consumers’ and businesses’ complaints. The Authority takes action to ban non-compliant advertisings. When a marketer is unwilling or unable to follow the rules supervised by ASA, or when a market continues to fail, the ASA can ask for support the Trading Standards (www5) or Ofcom (www6) (the UK communications regulator);

<sup>11</sup> For the very recent pecuniary sanction of 170.000 PLN issued by the Polish Authority in relation to the misleading advertising (see www3). In the case in question, consumers were misled by informing that the company offered bonds or social bonds. The company did not provide any information on investment risk. Moreover, “The entrepreneur did not decide to voluntarily abandon the practice despite a provisional decision. Therefore, the Office has taken action which led to closing the website where the misleading content was presented” (www4).

<sup>12</sup> Competition Authorities supervise and enforce, *inter alia*, the legal rules set out by the Unfair Commercial Directive, and the Directive on misleading and comparative advertising, both in the collective interest of consumers and other competitors.

<sup>13</sup> For the purpose of the present article, it means for financial promotion see Chapter 4 of the Conduct of Business Sourcebook (COBS); Chapter 3 of the Consumer Credit Sourcebook (CONC); Chapter 3 of the Mortgage and Home Finance: Conduct of Business Sourcebook (MCOB).

– the Committee of Advertising Practice (CAP) – the organisation responsible for writing and maintaining the Advertising Codes where we can find several rules regarding advertisement practices for financial product and services (www7). It also provides authoritative advice and guidance for advertising industry, agencies and single advertisers.

Beside several specific legal norms, there are some interesting examples of national practices. In the United Kingdom, it is worthily notice that there are no adverts on the public service TV<sup>14</sup> and radio broadcaster BBC, for this reason, online advertising industry is particularly interesting in the online advertisements (Fuchs, 2018) becoming a dominant sector of the ad market.

In Australia, both the Corporations Act and the National Credit Code prohibit canvassing techniques of financial products selling. The hawking prohibitions aim to prevent predatory and unsolicited selling of credit products and services to retail clients. During the COVID-19 emergency, ASIC paid a particular attention to any warning, disclaimer and advert regarding wide range of financial products and services across a broad range of any kind of media. The regulator exercised several powers, such as issuing public warning notice<sup>15</sup>, issuing a stop order<sup>16</sup>, seeking an order for redress<sup>17</sup>, cancelling an advertiser's Australian Financial Services licence or credit licence<sup>18</sup>, making a temporary or permanent banning order<sup>19</sup>, and so forth.

### **b) National non-legally binding rules**

There are also many specialised independent bodies that control advertising across national media<sup>20</sup>. These bodies supervise and enforce rules set forth in non legally binding advertising standards and rules, such as the Italian Codes of Advertising Self-Regulation, the Code for Financial Advertising (www8) in the New Zealand, ecc.

In some countries, these organs can take action to ban non-compliant advertisings. For example, in the UK, when a marketer is unwilling or unable to follow the rules supervised by ASA, or when a market continues to fail, the ASA can ask for support the Trading Standards (www5) or the UK communications regulator (Ofcom).

---

<sup>14</sup> Similar prohibition is in Sweden. The two public TV stations (SVT1 and SVT2) are not allowed to advertise (Anderson, 2005).

<sup>15</sup> Regulatory Guide 234.182.

<sup>16</sup> Regulatory Guide 234.172.

<sup>17</sup> Regulatory Guide 234.176.

<sup>18</sup> Regulatory Guide 234.190 and 234.191.

<sup>19</sup> Regulatory Guide 234.192.

<sup>20</sup> For instance, the Advertising Standards Authority (ASA) and the Committee of Advertising Practice (CAP) in the UK, the European Advertising Standards Alliance (EASA) which is the single authoritative voice on advertising self-regulation issues in Europe, the Italian Advertising Standards Authority (*Istituto dell'Autodisciplina Pubblicitaria*, IAP) and others.

### c) **BigTech companies' self-regulations**

Online advertising of financial products and services is one of the largest and the most lucrative advertising categories on the Internet. Most legally binding regulations apply to such sector. However, the BigTech companies have developed their own advertising policies with 'self'-restrictions regarding financial products and services.

As an example, Google (www9) bans ads for short-term, high-cost loans with Annual Percentage Rate (APR) above 36% and which require repayment in full in 60 days or less.

Microsoft (www10) prohibits various financial products and services advertisements, such as Binary Options, services which facilitate illegal purposes, Ponzi schemes, pyramid schemes, etc. Then there are identified specific policies regarding different countries.

Financial advertisements policy of Facebook appears very vague. The company prohibits (www11) expressly just three financial products/services, such as Initial Coin Offerings, Binary Options, Contract for difference Trading. While LinkedIn (www12) restricts ads related to financial services and short-term loans (payday loans and similar).

As we can notice, the ad restrictions vary by tech company, nonetheless almost all of them impose restrictions or bans on adverts for binary options, services in cryptocurrencies, short-term loans<sup>21</sup> with repayment period no longer than 90 days, ads for loans with APR higher than 36%, and so on. Someone could say that it seems a good sign, however many studies shown that financial product providers exploit still existing "loopholes", in other words, they find numerous methods for getting around advertising restrictions of BigTech companies, for instance through "redirection" to another page with non-compliant product<sup>22</sup>.

### **3.2. Review sites**

However, consumers can also try to protect themselves by using the Internet in their favor, and in particular review sites. These websites can improve the knowledge about available products and services and thus reduce the information asymmetry between buyer and seller, thereby mitigating the issues of moral hazard.

Since many professionals may care about their reputation which influence their future business, being aware of the online reviews, they would tend to provide good products and services. Previously, we could communicate only with

---

<sup>21</sup> As reported by the Wall Street Journal, those bans were applied about five years ago because of the pressure from public regulators and consumer advocates (see www2).

<sup>22</sup> For more information see: www13.



small group of people (generally family and friends), nowadays, with the access to the Internet, we are able to reach a much larger audience. Although the information can be still asymmetric, an incentive to exploit that imbalance will be certainly lower.

Obviously, we have to be aware that the market is constantly evolving, and some professionals try to fight back by issuing fake or manipulating reviews or ratings. The scale of this problem grows continuously. To make the problem even worse, the fake online review is becoming a new business by assuming different levels of sophistication they generate huge volumes of false, both positive and negative, reviews<sup>23</sup> and profiles.

Competent authorities should continue to invest in SubTech and RegTech that can identify false and/or cloned firms and online frauds and scams.

#### **4. SOME RECOMMENDED GOOD PRACTICES FOR FINANCIAL ADVERTISING**

In order to provide comprehend, not misleading and ethically correct financial adverts there are some recommended good practices that can be used by advertising providers. The following recommendations are applicable to different kinds of advertising of financial products or services, including but not limited to television, radio, print, online ads, adverts placed out of home (public transports, billboards) and so forth.

- The adverts shall be clear, comprehensible (using simple and understandable language), not misleading, truthful, complete, accurate and objective;

- Information provided should be current, easily legible or clearly audible (www8) as appropriate, in accordance with the medium used for advertising. The speed of reading should be comprehensible to an average consumer. Furthermore, they should not be undermined by distracting sounds, dense block of text or images;

- Expressions “that may create false expectations for a consumer regarding the availability or the cost of a credit” shall be prohibited<sup>24</sup>;

- The adverts must be clearly identifiable. They should be easy distinguished from a non-promotional content;

- The advert must provide clear disclosure of all the fees and extra costs;

- The advertiser should take reasonable steps to ensure that any illustration and communication provided are fair, clear<sup>25</sup> and not misleading;

- Should well-define all characteristics, advantages and associated risks;

---

<sup>23</sup> For more information see: European Parliamentary Research Services, EPRS (2015).

<sup>24</sup> Article 10 of the Directive 2014/17/EU.

<sup>25</sup> In particular cases, competent authorities can oblige firms to use some specific expressions, see: Restrictions on use of terms.



- The principles of fairness, good conducts and transparency should be granted;
- In particular cases, both product and related advert, should be, *ex ante*, verified and approved by a competent authority<sup>26</sup>;
- record-keeping all the advertising information and documents;
- Advertising message should not create a misleading impression (www14) and unrealistic expectation about what a financial service can achieve;
- Ad should not present that a product or its provider has an approval, affiliation or license which does not actually have;
- Messages should not contain polysemic words, such as “easy”, “simple” or “secure” investment;
- They should not overstate the safety of the product or service or understate risks;
- Advertising materials should include some specific claims, such as “before acceptance, read carefully prospectus”, warnings, such as “borrowing money costs money”<sup>27</sup>, “are you able to repay this loan in time?”, or indication of the consequences of default, as it occurs in the case of drug adverts;
- A dual control system for advertising elements and self-regulation may be provided, which consists of (i) an external control, and (ii) an internal review by one or more internal department of the financial institution.

The violations of the advertising restrictions can lead to:

- Temporary suspension of the advertising account;
- Temporary or permanent suspension of the diffusion of the advertisements;
- Refusal, revocation or suspension of licences;
- Prohibition of the diffusion of the ads, in particular situation even before their publication;
- All the advertisings considered as unfair commercial practices should be automatically banned, in accordance with the Unfair Commercial Practices Directive;
- Imposition of the sanctions<sup>28</sup>, or even imprisonment<sup>29</sup>;
- Confiscation of financial assets;
- Compensation for victims of the professional misbehaviours must be provided.

---

<sup>26</sup> See art. 94, 94-*bis*, 101 of Legislative Decree of 24 February 1998, No. 58 “Testo Unico della Finanza (TUF)”.

<sup>27</sup> See for instance www15.

<sup>28</sup> In the UK, the Trading Standards can impose an unlimited fine.

<sup>29</sup> In the UK, the prison sentences of the Crown of Magistrates’ Court are usually up to two years. As an example, see the case of Copycat Websites (www16); also, the section s1041E of the Australian Corporations Act 2001 imposes imprisonment up to 10 years, as well as the section s33 of the Australian National Credit Act (max. 2 years).

## CONCLUSIONS

Thus, as we could see, the advertisements are omnipresent, unavoidable and often very intrusive. As it has been noted by Jeffrey Schrank “advertising has taken quiet away from us, has made the choice impossible. Our minds become jammed with bits and pieces of jingles, buzz words, products, ad images, brand names, and slogans so there is no room for meditation and little room for self-confrontation” (Schrank, 1977: 90). Moreover, they strategically distort our perception and vision of many things, they constantly try to demonstrate that the grass is greener elsewhere. In the case of banking and financial products and service these practices are able to produce very serious and disastrous financial and behavioural consequences. The proliferation of frauds and unfair conducts make all of us a potential victim.

Choosing banking/financial products and services can be a complex process which requires attention and knowledge. In this regard, advertising can help, but it can also make all the procedure more complicated, especially in case of non-real time financial promotion, it means when a financial promotion is not made in the course of a personal visit, telephone conversation or other interpersonal and interactive dialogue. There must be kept in mind that information held by sellers (*here* advertisers) and potential buyers are imperfect and unequal<sup>30</sup>.

In the time of the pandemic and the ongoing military conflict, the adverts of the “perfect PC”, the “perfect home”, the “perfect life”, become little less attractive when people face a serious financial distress due to joblessness, reduction of working hours, illness, increase interest rates, etc. The issue may become even more serious as long as the professionals’ objectives are profits only in monetary terms.

Although the present paper is focused primarily on the protection of consumers, especially on vulnerable segments of them, it must be stressed that the misleading and unfair comparative advertising can be, and very often do, detrimental also to the fair competition between competitors presented on the market<sup>31</sup>.

Consequently, the adverts, not only financial but also those considered more widely, constitute very important, private and public issue which should be adequately regulated and carefully supervised by several different regulators.

---

<sup>30</sup> In this regard see the “lemons model” provided by Akerlof (1970).

<sup>31</sup> About the recent investigation opened by Italian Competition Authority against Google see [www17](#).

The complete ban<sup>32</sup> may be counter-productive, as it “can have much the same effect by making it more difficult for smaller firms and entrants to inform customers of the existence of their brands and products” (Nelson, 2004). Moreover, the ban on particular kind of media might lead to a substitution pushing advertisers towards other forms of promotion. Nevertheless, the free, unregulated advertising market can quickly trigger over-advertising detrimental to the consumers. A well-adjusted combination of advertising and other promotional strategies is needed to make consumers aware about the products and services available on the market.

For these reasons, policy actions should be balanced and prudential providing strong enforcement measures and available technology for supervision activities (so-called SupTech).

Nevertheless, it must be highlighted that advertising alone cannot be responsible for all bad decisions taken by customers. There are numerous other elements and circumstances which can easily affect a final decision, such as rush, stress, naiveté, irresponsibility, irrationality<sup>33</sup>, risk-assessment biases, disinterest in available alternatives, over-self-confidence<sup>34</sup> in own ability to repay a loan, overoptimism, personal preferences, financial illiteracy, social/historical context, temporary financial hardship, emergency, misfortunes, and other particular situation.

For such a reason, instead of completely recriminate advertising practices, the public organs should also continue to provide, “Public Warnings” (www18; www19) and “Awareness Campaigns”<sup>35</sup> which contain warnings and offer advice to consumers about the main financial products/services and the financial frauds, scams and so forth, as the issue is too relevant to be ignored, especially in nowadays.

## DISCLOSURE STATEMENT

The author reports no conflicts of interest.

<sup>32</sup> And also as noted by Attas (1999: 49) “(...) the harmful, but contingent, consequences of behavior influenced by a deceptive advertisement cannot provide reasons for condemning it in and of itself”.

<sup>33</sup> As to the theory of bounded rationality, Simon (1957) noted that every day individuals have to face a great amount of decisions, consequently it is almost impossible for them to devote their mental energies necessary to behave rationally.

<sup>34</sup> And also “people tend to overestimate typical results as well as their own likely results from using the advertised product” (Taha and Petrocelli, 2020: 83).

<sup>35</sup> Such as “Check, read, ask!” launched by the President of the Polish Office of Competition Authority, see www20; or “Sprawdź, zanim podpiszesz” (www21), which informs consumers about every relevant information regarding financial products.

## REFERENCES

- Akerlof, G.A. (1970). The Market for ‘Lemons’: Quality Uncertainty and the Market Mechanism. *Quarterly Journal of Economics*, 84.
- Akerlof, G.A. and Shiller, R. (2015). *Phishing for Phools. The Economics of Manipulation and Deception*. Princeton: Princeton University Press.
- Anderson, S.P. (2005). *Regulation of television advertising*. <https://core.ac.uk/download/pdf/7191685.pdf> [Accessed 20.01.2022].
- Attas, D. (1999). What’s wrong with “Deceptive” Advertising. *Journal of Business Ethics*, 21.
- Banco de Espana (2018). *The Advertising Activities of banking products and services of the entities supervised by Banco de Espana*. [https://www.bde.es/f/webbde/Secciones/Publicaciones/PublicacionesAnuales/MemoriaServicioReclamaciones/17/The\\_advertising\\_activity\\_of\\_banking\\_products\\_and\\_services\\_of\\_the\\_entitie.pdf](https://www.bde.es/f/webbde/Secciones/Publicaciones/PublicacionesAnuales/MemoriaServicioReclamaciones/17/The_advertising_activity_of_banking_products_and_services_of_the_entitie.pdf) [Accessed 10.01.2022].
- Bulgarea, C.N. (2010). Distribution of Banking Products and Services. *Annals of Faculty of Economic*, 1(2).
- Bureau European des Unions de Consommateurs – BEUC (2018). *Automated Decision Making and Artificial Intelligence – A consumer perspective*. BEUC Position Paper.
- Bureau European des Unions de Consommateurs – BEUC (2010). *Online Advertising – Impact on Consumers*. BEUC Reflection Paper.
- Department for Business, Innovation and Skills – BIS (2013). *Making Consumer Credit Markets Fair. Payday lending advertising research conducted for BIS by Ipsos MORI Social Research Institute*.
- European Parliamentary Research Services – EPRS (2015). *Online consumer reviews. The case of misleading and fake reviews*, PE 571.301.
- Financial Services Consumer Panel (2020). *Discussion Paper on Digital Advertising in Financial Services*. [https://www.fs-cp.org.uk/sites/default/files/fscp\\_final\\_digital\\_advertising\\_discussion\\_paper\\_20200630.pdf](https://www.fs-cp.org.uk/sites/default/files/fscp_final_digital_advertising_discussion_paper_20200630.pdf) [Accessed 25.07.2022].
- Financial Services User Group – FSUG (2019). *Responsible consumer credit lending. FSUG opinion and recommendations for the review of the Consumer Credit Directive*. [https://ec.europa.eu/info/sites/info/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/fsug-opinions-190408-responsible-consumer-credit-lending\\_en.pdf](https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/fsug-opinions-190408-responsible-consumer-credit-lending_en.pdf) [Accessed 10.03.2022].
- Fuchs, C. (2018). *The Online Advertising Tax as the Foundation of a Public Services Internet: A CAMRI Extended Policy Report*. London: University of Westminster Press.
- Legislative Decree of 24 February 1998, No. 58 “Testo Unico della Finanza (TUF)”.
- Lindholm, O. (2008). *The Influence of Sales Promotion on Consumer Behavior in Financial Services* (Master’s Thesis). Helsinki: Helsinki School of Economics.
- MacBride, S. (1980). *Many Voices, One World: Communication and Society, Today and Tomorrow*. New York: Unipub (UNESCO).
- Mazur, Z.M. (2021). Where is the limit of Misselling. *The International Review of Financial Consumers*, 6(1).
- Mazur, Z.M. (2022a). Sulla tutela del consumatore volutamente disinformato. A proposito dell’ordinanza della Corte (Settima Sezione) in causa C-198/20 del 10.06.2021. *Rivista di diritto dell’impresa* (forthcoming).
- Mazur, Z.M. (2022b). The Consumer Lending Protection. How to prevent the predatory lending and “debt slavery” on the small-dollar lending market during and after the COVID-19 emergency. (manuscript submitted for publication).
- Miller, Jr. T.W. (2019). *How do small-dollar, nonbank loans work?* Arlington, Virginia: The Mercatus Center at George Mason University.
- Nagler, M.G. (1993). Rather bait than switch. Deceptive advertising with bounded consumer rationality. *Journal of Public Economics*, 51. [https://doi.org/10.1016/0047-2727\(93\)90071-Z](https://doi.org/10.1016/0047-2727(93)90071-Z)

- Nair, D. (2020). Affective Priming Technique in Advertising – An Empirical Study With Reference to Fast Moving Consumer Goods Sector. *Academy of Marketing Studies*, 24(3).
- Nelson, J. (2004). *Advertising Bands US*. EH.Net Encyclopedia, <https://eh.net/encyclopedia/nelson-adbans/> [Accessed 25.07.2021].
- Ofcom (2020). *The Communication Market Report 2020*. [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0026/203759/cmr-2020.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0026/203759/cmr-2020.pdf) [Accessed 12.03.2022].
- Pollay, R.W. (1986). The Distorted Mirror: Reflections on the Unintended Consequences of Advertising. *Journal of Marketing*, 50(2). <https://doi.org/10.2307/1251597>
- REFIT Platform Opinion on the submission by 5 organisations on the consumer Credit Directive 2008/58/EC. <https://ec.europa.eu/info/sites/default/files/vi4afccd.pdf>.
- Regulatory Guide 234. <https://static1.squarespace.com/static/52b5f387e4b08c16746b6b70/t/59d87b77e45a7c0ce23b1222/1507359611940/rg234-published-27-september-2017.pdf> [Accessed 09.04.2021].
- Restrictions on use of terms. <https://www.handbook.fca.org.uk/handbook/MCOB/3A/2.html> [Accessed 29.03.2021].
- Schrank, J. (1977). *Snap, Crackle, and Popular Taste: The illusion of Free Choice in America*. New York, Delacorte: Dell Pub. Co.
- Simon, H.A. (1957). *Models of man*. New York: John Wiley.
- Taha, A.E. and Petrocelli, J.V. (2020). Advertising Options. *Tulsa Law Review*, 56(1).
- Weinstein, N.D. (1980). Unrealistic optimism about future life events. *Journal of Personality and Social Psychology*, 39(5). <http://dx.doi.org/10.1037/0022-3514.39.5.806>
- (www1) [https://www.uokik.gov.pl/news.php?news\\_id=16999](https://www.uokik.gov.pl/news.php?news_id=16999) [Accessed: 06.10.2021].
- (www2) <https://www.wsj.com/articles/how-payday-lenders-target-consumers-hurt-by-coronavirus-11591176601> [Accessed 20.10.2021].
- (www3) [https://uokik.gov.pl/aktualnosci.php?news\\_id=18764](https://uokik.gov.pl/aktualnosci.php?news_id=18764) [Accessed 03.11.2022].
- (www4) [https://uokik.gov.pl/news.php?news\\_id=18786&news\\_page=3](https://uokik.gov.pl/news.php?news_id=18786&news_page=3) [Accessed 03.11.2022].
- (www5) <https://www.asa.org.uk/uploads/assets/uploaded/5b773c7e-0e04-41bd-b09b30a440d44fd4.pdf> [Accessed 20.10.2021].
- (www6) <https://www.ofcom.org.uk>.
- (www7) <https://www.asa.org.uk/uploads/assets/7f8b2737-2876-489f-a553f655c4fd8f07/BCAP-Code-14-Finance.pdf>.
- (www8) <https://cdn.asa.co.nz/wp-content/uploads/2021/11/Financial-Advertising-Code-November-2021.pdf> [Accessed 03.11.2022].
- (www9) [https://support.google.com/adspolicy/answer/2464998?hl=en&ref\\_topic=1626336](https://support.google.com/adspolicy/answer/2464998?hl=en&ref_topic=1626336).
- (www10) <https://about.ads.microsoft.com/en-us/resources/policies/financial-products-and-services-policies> [Accessed 08.08.2022].
- (www11) <https://www.facebook.com/policies/ads/prohibited-content/prohibited-financial-products-and-services> [Accessed 08.08.2022].
- (www12) <https://it.linkedin.com/legal/ads-policy> [Accessed 08.08.2022].
- (www13) <https://searchengineland.com/payday-loan-ads-still-showing-google-ban-258945> [Accessed 20.10.2021].
- (www14) <https://www.cpc.ie/consumers/shopping/misleading-advertising/> [Accessed 03.11.2022].
- (www15) <https://www.afm.nl/en/nieuws/2009/feb/waarschuwingszin> [Accessed 03.11.2022].
- (www16) <https://www.asa.org.uk/news/asa-welcomes-sentencing-of-criminals-behind-fraudulent-copycat-websites.html> [Accessed 08.09.2021].
- (www17) <https://en.agcm.it/en/media/press-releases/2020/10/A542> [Accessed 12.09.2021].
- (www18) [https://www.knf.gov.pl/dla\\_konsumenta/ostrzezenia\\_zagranicznych\\_organow\\_nadzoru](https://www.knf.gov.pl/dla_konsumenta/ostrzezenia_zagranicznych_organow_nadzoru) [Accessed 10.12.2021].

(www19) [https://www.knf.gov.pl/en/CONSUMERS/Information\\_for\\_the\\_financial\\_market\\_consumers/Public\\_warnings](https://www.knf.gov.pl/en/CONSUMERS/Information_for_the_financial_market_consumers/Public_warnings) [Accessed 10.12.2021].

(www20) [https://www.uokik.gov.pl/news.php?news\\_id=16629](https://www.uokik.gov.pl/news.php?news_id=16629)

(www21) <https://www.zanim-podpiszesz.pl>

Zakończenie recenzji/ End of review: 27.10.2022

Przyjęto/Accepted: 10.11.2022

Opublikowano/Published: 07.12.2022

## MINERAL RESOURCE TAXATION IN POLAND AS ENVIRONMENTAL REVENUE

Artur Ochot\*



<https://doi.org/10.18778/2391-6478.4.36.04>

### Abstract

**The purpose of the article/hypothesis.** The statistics on environmental taxes in Poland lack a very specific resource taxation in form of the tax on extraction of certain minerals and the exploitation levy, which is the subject of this article. This paper aims to provide a proof that these taxes should be considered environmental in nature and as such are required to be reported by the European law. Thus, the article suggests and recommends that national environmental tax revenues data should be corrected. **Methodology.** First, the law and literature overview is presented, taking view on the characteristics of environmental taxes and placing those taxes that are subject of this article into this category. Next, fiscal importance of those taxes is measured within budgets of its receivers. Additionally, the article provides the information on how much environmental tax statistics would have changed after taking into consideration the taxes discussed in this article. The research period of this study is 2012–2020. It is dictated by the introduction of tax on certain mineral extraction and the latest budget reports available. The research is limited by the accessibility of public data which does not provide separate accounts of hydrocarbon taxes (which should be excluded from environmental data) and taxes on other minerals. **Results of the research.** The overview of the literature provides some evidence that the exploitation levy should be treated as a tax and, together with the tax on certain mineral extraction, should be treated as environmental in nature. Thus, they should be implemented in national environmental tax statistics. Although majority of environmental tax revenues is made by taxes on energy, the result of this implementation would significantly change values of taxes on pollution and resources, making it second (out of three) most important category within environmental taxes in Poland.

**Keywords:** taxation of minerals, natural resource taxation, exploitation levy, tax on certain mineral extraction, environmental tax statistics.

**JEL Class:** H23, H27, H87.

\* Szkoła Doktorska Ekonomii i Finansów, Uniwersytet Ekonomiczny w Katowicach, e-mail: [artur.ochot@edu.uekat.pl](mailto:artur.ochot@edu.uekat.pl)  
<https://orcid.org/0000-0002-2758-8946>

## INTRODUCTION

Since the time of first economists, there has been a common belief that countries that are rich with natural resources, especially mineral ones, can use them as basis for sustained economic growth (Badeeb, Lean and Clark, 2017: 123). Thus, natural resources are an opportunity to foster the development and reduce poverty (Ing, 2020: 1). Rent, in economy, is something a company earns when the price they receive for the goods they produce is above the level needed to attract a given company into the industry, or to stop it from leaving if they are already in the market (Tilton, 2004: 145). To capture the resource rent, governments design taxation schemes that come with significant challenges (Ing, 2020: 1) that result in slower economic growth (Banda, 2021: 1).

Mining sector differs from other industries because it constitutes a combination of unique characteristics. These specifics include high capital intensity, long time between production and development, long payback period, volatile mineral commodity prices and finite mine life (Banda, 2021: 1), as well as exploitation of nonrenewable resources that companies do not own (Otto et al., 2006: 16).

The taxation on mineral resources extraction has the potential to drive away mining investments, which should flow to countries that have abundant and high-grade deposits (Banda, 2021: 1). It was noticed that, during 1990s, multinational mining corporations shifted their exploration investments into regions previously closed or considered too risky – this caused changes in mineral policies – reduced entry barriers and lowered the risk of investments (Otto, 1998: 79). Today, mining capital is highly mobile, therefore, countries are in a pressing need to design competitive mining tax codes to attract this capital (Banda, 2021: 1), which results in a vast variety of mineral resource taxation schemes.

In Poland, there are currently two mining-specific budget contributions that are the subject of this article: exploitation levy (Act of 9<sup>th</sup> June 2011: art. 134) and tax on certain mineral extraction (Act of 2<sup>nd</sup> March 2012).

The literature concerning these two taxes focuses on the tax and levy separately (except Połczyński, 2014). The literature on tax on certain mineral extraction considers mostly its construction (Duda, 2013; Pest, 2016) or fiscal efficiency (Ochot, 2021), whilst exploitation levy is described in the aspect of its nature (Borys, 2016; Ofiarski, 2017; Szamałek, 2005), as it is not clear whether it should be treated as a tax. Only Małecki (2016) considers tax on certain mineral extraction as an ecological tax and compares its revenue to other taxes described in his article as environmental. However Małecki's paper lacks other levies treated as environmental in European statistics and includes an agricultural tax and forest tax (Małecki, 2016: 231), the first of which, in the authors' opinion, does not have any ecological characteristic and the second one seems to be anti-environmental



in its nature. This shows that there is a research gap in the area concerning treating mineral extraction taxes in Poland as the environmental ones.

European regulation (No 691/2011, an. II, sec. 3) stipulates that all member states shall produce statistics on environmentally related taxes, one category being resource taxes. However, it should exclude mineral resource taxes, especially the ones understood as rent (Eurostat, 2013: 17). Both Polish mineral resource taxes are not mentioned in the national tax list, although few countries have this kind of contribution regarded as resource taxation<sup>1</sup>. This leads to the goal of this study, which aims to show Polish mineral resource taxes as environmental revenue.

The first proposed hypothesis is as follows: taxes on mineral resource excavation in Poland should be considered as environmental revenue. The second proposed hypothesis states that taxes on mineral resource excavation have a considerable value compared to other environmental taxes.

The first section of the article treats shortly about the characteristics of mineral taxation and points to an environmental character of the levies. The second part compares the Polish tax on certain mineral extraction and exploitation levy. The study ends with the presentation of revenue from both Polish mineral resource taxes against all environmental revenue for the period of 2012–2020.

## 1. CHARACTERISTICS OF MINERAL TAXATION

There are three main reasons for the special taxation of mineral resources. Firstly, the wealth associated with particularly rich deposits belongs to the citizens of the host country, where the resources lay. Secondly, the state should be compensated for the use of mineral resources by companies, given the intrinsic value arising from nonrenewable nature of resources. The last reason is related to the division of wealth resulting from mining – it is not righteous, as too much of it goes to the mining companies and too little to the host country and its people (Tilton, 2004: 144). Other reasons include protection of the state's interests in the field of natural resources, referred to as economic nationalism (Kozieł, Pawłowski and Kustra, 2018: 35). The more the government taxes the mineral sector, the greater the share of wealth, created by mining, that goes to the government (Otto et al., 2006: 8).

Natural resources are frequently owned or controlled by governments, as it is in case of Poland (Act of 9<sup>th</sup> June 2011: art. 10), but they may be also owned by the people in general, by the owner of land or by the crown. The owners have interest in receiving payments for the taking of the property (Otto et al, 2006: 16). From a public finance perspective, the taxable capacity possessed by economic rents from

<sup>1</sup> National list of taxes (www1) used for statistical measures shows mineral resource taxation in Bulgaria (extraction of quarry minerals), Spain (exploitation of hydrocarbon and mines), Cyprus (mining tax), Latvia (natural resources tax), Romania (tax on mineral extraction activities) and Slovakia (tax on excavation areas).

natural resources is especially attractive because such rents can, in principle, be collected without introducing inefficiency in the pattern of resource use (Heaps and Helliwell, 1985: 422). Also, objectives of the governments of still developing countries can differ from those of already developed countries and are not always consistent with maximizing returns from the projects (Parsons, 1991: 99).

There are many possible ways to tax mineral resources. For instance, the Brown tax is a joint venture between the government and the private sector investors. The government contributes a pre-specified proportion of all costs of the mineral project when the costs are incurred and later receive the same proportion of all project revenues (Parmenter, Breckenridge and Gray, 2010: 281). Royalty denotes taxes on gross production value, although parts of the literature use royalty more generally to include also net profit or rent taxes. The difference between taxes and royalties has historical roots related to their justification. Royalties derive from the ownership of resources by the crown, thus, a functional distinction can be made between royalties and general tax revenues (Lund, 2009: 289).

After World War II, natural resource taxation has come to rely relatively less on royalties and more on income-based or rent forms of taxation, which brought with it economic efficiencies<sup>2</sup>. This has rendered natural resource fiscal regimes to be much more vulnerable to tax avoidance, based on taxpayer exploitation of difficulty in the fair market valuation of items of income and deduction (Durst, 2016: 25). An economic rent tax base would cause smaller taxation distortions than quantity base royalties (Freebairn and Quiggin, 2010: 384). Taxing a nonrenewable resource typically shifts production through time, compresses the economically recoverable resource base and shrinks social welfare (Rowse, 1997: 221). More distortionary types of taxes can potentially have negative effects on economic growth in developing countries (Abdelwahed, 2020: 16).

This leads to numerous tax types and models that are presented in Diagram 1. *Personam* taxes are the charges against unspecified definition of net revenues less qualifying costs (Otto et al., 2006: 30–31). Tax base can be established as profit or resource rent, which is hard to implement and is rarely used (usually only in oil industry). Moreover, it can be a production sharing contract in which the only profit from excavation is divided between a company and the state (common in oil industry) (Kozieł, Pawłowski and Kustra, 2018: 36–37). Another category of taxes are *in rem* taxes that charge against assessed mineral deposit or the input and actions needed to exploit it. They can be divided into taxes that affect the variable costs of the project or taxes that affect the fixed costs of the project (Otto et al., 2006: 30–31). Tax base in those is usually based on quantity or value of extradicted mineral (Kozieł, Pawłowski and Kustra, 2018: 36–37).

---

<sup>2</sup> In Poland there has been an attempt to implement rent-based tax on hydrocarbon extraction (Act of 25<sup>th</sup> July 2014). The law was cancelled before the first payment was realised (Act of 11<sup>th</sup> September 2019), due to very low predicted income in the years prior to payment implementation.

The described types of taxes are all direct taxes, however, it is important to note that there are also indirect taxes that can be implied on mineral goods (Połczyński, 2014: 89).

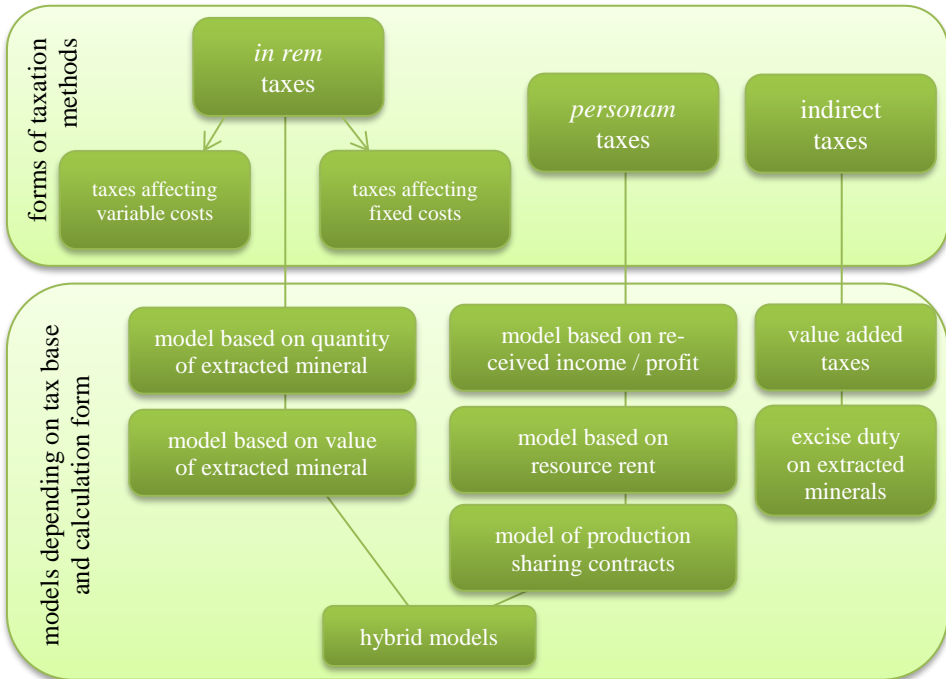


Diagram 1. Mineral resources taxation types and models

Source: own elaboration based on: Kozieł, Pawłowski and Kustra (2018: 36–37); Otto et al. (2006: 30–31); Połczyński (2014: 89).

It cannot be denied that one of the major consequences of economic growth is the increase in environment pollution. Especially mining is considered one of the most polluting anthropogenic activities (Santana et al., 2020: 1). It has resulted in large scale, extensive pollution of top-soils, sediments, aquifer, ground water and streams (Gu, 2018: 1).

One of the fiscal instruments used to directly impose environmental pollution are environmental taxes. They are defined by a tax base in physical unit, or its proxy, on something that has a proven, specifically negative impact on the environment. They should internalise the negative effects of economic activities and relieve some of the pressures on environment (Andreoni, 2019: 17). On the other hand, they are considered as prices that one pays for pollution (Małecki, 2016: 227).

Indirect environmental taxes are easier to implement and they can significantly reduce the pollution and act as a barrier to excessive energy consumption (Norouzi, Fani and Talebi, 2022: 1). The most popular form of environmental taxation is the indirect tax on gas emissions that concerns taxing energy and transport fueled mostly by burning some of mineral resources that, since the beginning of the century, contribute to 96–97% of all environmental revenue in European Union each year (www2).

As the taxes on mining sector, especially royalties, should limit the exploitation or force internalisation of negative external effect, they have a characteristic of a direct environmental tax. However, Eurostat (2013: 17) does not consider those revenues environmental because resource rent, explained as value of output less extraction costs, is treated as property income for the state. Additionally, statistics guide recommends that taxes on hydrocarbon extraction are excluded, as this approach is more useful for cross-country analysis. This suggests that exclusions should be based only on rent taxes, especially on extraction of hydrocarbons. The reasons for this are that the revenue from such taxes is important in very few EU countries and the amounts of taxes are not comparable across countries as applied taxation models differ and the revenue can be highly volatile over time.

## 2. POLISH MINERAL RESOURCE TAXES

Before implementing tax on extraction of certain minerals, effective tax rate on mineral industry in Poland was around 50% in 2005. Therefore, it was on a desirable level between 40–50% and after the tax implementation it should have risen to 79% (Połczyński, 2014: 96–98). However, in justification for tax implementation (2012: 7), the state calculated that previous effective tax rate on mining industry was around 20%. The entire taxation system of minerals consists of corporate tax, property tax, concessions and stamp duty related to them, individual agreement for the establishment of mining usufruct rights, exploitation levy and other related levies concerning depositing substances and waste with penalty fess (Ochot, 2021: 208).

As it is pointed by Szamałek (2005: 312), establishing taxation for the economic use of the environment results from the theoretical foundations of environmental economics, and in particular the concept of the external effects accompanying any economic activity. Exploitation levy is not considered to be a typical levy or a typical tax (Ofiarski, 2017: 318). Courts have decided that it is a non-tax claim which is a compensation for interference with the natural environment and for environmental damage caused by the exploitation of minerals (Judgment, II GSK 845/15; Judgment, II SA 526/98). Thus, there is a special price for the use of renewable and nonrenewable environmental resources (Judgment,

K 10/09), making it meet the definition of environmental tax. Ofiarski (2017: 317) says it is states revenue, which is later distributed between communities and The National Fund for Environmental Protection and Water Management (later: NFEPaWM). An argument towards it being a levy states that it has a returnable benefit – the fee rises a claim for a specific benefit to the taxpayer, usually to the entity paying the fee. NFEPaWM revenues are intended for long-term liabilities when it comes to geology and mining, and are not returnable. Furthermore, the communities that are considered ‘mining communities’, mostly do not use revenue potential from exploitation levy for future development, when the nonrenewable resources are gone (Borys, 2016: 46–48). Also, levies listed in the environment protection law are considered directly as environmental revenue (www1), but exploitation levy and levies connected to it are not, whilst the act considers it as other environmental fees and fines (Act of 27<sup>th</sup> April 2001: art. 273). Although the construction of exploitation levy clearly points to a typical form of public resource rent (Połczyński, 2014: 92), it should not be denied that it is also a form of environmental levy.

Intention for tax on copper and silver extraction was to capture the extraordinary profits of mining entities (Duda, 2013: 129). Only copper ores (from where also silver is derived) were taxed as it is third most consumed metal in the world with limited resources (Kozioł, Pawłowski and Kustra, 2018: 35), with Poland being responsible for 3% of the global copper supply and 6% of silver supply (Kozioł, Postrożny and Świdziński, 2016: 71–78). Exploitation levy is considered a tax based on extracted quantity of mineral (Duda, 2013: 129), however, the exploitation levy does not consider market prices of the extracted materials (Połczyński, 2014: 92) since 2002 – earlier the levys value was a percent of the minerals’ sale price (Szamałek, 2005: 312). Further taxation of hydrocarbons was dictated by supposed future rise of hydrocarbon extraction in Poland, however, the activity of entities operating in the field of exploration, identification and exploitation of deposits, as well as the number of potential taxpayers, fell in the coming years (Ochot, 2021: 209–210).

Despite the legislator focusing mostly on additional revenue, Małecki (2016: 232) says that tax on certain mineral extraction should be considered an environmental tax. Opposite to exploitation levy, the local government units do not receive any revenue from this tax, which makes redistribution of funds obtained from it more just. On the other hand, it does not work for neutralizing environment degradation – the externalization of environmental protection costs is apparent (Połczyński, 2014: 92). Another argument for this is that there are no mechanisms that support new investments within the tax law (Pest, 2016: 566), but it can restrain the use of resources in a longer time perspective (Duda, 2013: 126). Elements of the tax structure from both tax on certain mineral extraction and exploitation levy are summarized and compared in Table 1.

Table 1. Comparison of tax on certain mineral extraction and exploitation levy construction

Characteristic	Tax on certain mineral extraction		Exploitation levy
Subject of tax	copper and silver extraction	hydrocarbon (oil and gas) extraction	all minerals (67 listed in annex + other) extraction*
Implementation date	18 <sup>th</sup> April 2012	1 <sup>st</sup> November 2019	1 <sup>st</sup> January 2002 (new system, old system worked since 1 <sup>st</sup> September 1994)
Taxation method	<i>in rem</i> taxes affecting variable costs		
Taxation model	based on value of extracted mineral		based on quantity of extracted mineral
Taxable person	companies with concession on extracting subject of tax		companies with concession on extracting minerals or investment decision on hydrocarbon extraction, search and recognition
Number of taxpayers**	1 company: KGHM Polska Miedź SA	12 companies: mostly PGNiG SA	89 companies with concessions for solid minerals, 4 companies for levies connected to exploitation levy, 7 companies with concession on exploitation of hydrocarbons
Tax base	the amount of copper and silver contained in the produced concentrate	value of natural gas or crude oil extracted based on market price of tax subject and average currency exchange rate	extracted weight or value of mineral
Tax rate	formulas using tax base, market price of tax subject and average currency exchange rate	percent of tax base	fixed amount per tax base on each mineral
Corporate tax deductible cost	no		yes
Payment period	monthly		twice a year
Revenue receiver	the state		all local government units (mostly communities) and NFEPaWM

\* Rakoczy (2016: 98–106) suggests levies connected to exploitation levy should be considered as exploitation levy *sensu largo* – in this case subject of taxation will also include concession levies and levies for underground non-reservoir storage of substances, storage of waste and CO<sub>2</sub>.

\*\* Number of companies based on concessions given by the state in December 2020. Under certain circumstances concession might be given by district authorities (Act of 9<sup>th</sup> June 2011: art. 22). Those are not included.

Source: own elaboration based on: Act of 11<sup>th</sup> September 2019; Act of 15<sup>th</sup> February 1992: art. 15–16; Act of 2<sup>nd</sup> March 2012; Act of 4<sup>th</sup> February 1994: art. 86; Act of 9<sup>th</sup> June 2011: art. 133–143 and an.; Szamalek, 2005: 312, www3.

Solutions mentioned in tax construction are under discussion in the literature. For instance, the use of stock market price, which points to uncertain events influencing the tax (Pest, 2016: 563) or not taking into consideration cost of copper and silver production from an ore (Duda, 2013: 125–126). Moreover, worth mentioning are also taxable persons in tax on certain mineral extraction. For copper and silver extraction, it is only KGHM Polska Miedź SA, in which the state has 31,79% of shares (www4), and for hydrocarbons the main taxpayer is PGNiG SA, in which the state has 71,88% of shares (www5). This suggests that the state assured itself yearly income that is not depending on companies financial result.

Exploitation levy is considered, both by the legislator and in the literature, as an environmental tribute. Tax on certain mineral extraction is considered more as an additional revenue to the state. However, based on a construction comparison between the two, it can be concluded that both tributes share a lot of similarities. It points to the result that tax on certain mineral extraction is in fact an environmental tax and that exploitation levy has characteristics of a tax and should be considered as such.

All those revenues, excluding the ones based on hydrocarbon extraction, should therefore be included in national environmental data. This should not be treated as an argument against the taxation being environmental in character, as it is coming only from data comparison premises (Eurostat, 2013: 17).

### **3. THE INFLUENCE OF MINERAL RESOURCE TAXATION ON ENVIRONMENTAL REVENUE DATA**

Data concerning revenues received from the tax on certain mineral extraction and general tax income is provided by yearly reports of the state budget. Data on revenues from exploitation levy is gathered from yearly consolidated reports of the budgets of the local communities and profit and loss accounts of the NFEPaWM. Districts and voivodeships also get revenue from exploitation levy, however reason for it not to be taken into consideration is the fact that it only comes from hydrocarbons that should be excluded from environmental revenue data. Environmental tax statistics and GDP values are taken from Eurostat in national currency. Research period is limited to years 2012–2020, as 2012 marks the implementation of tax on certain mineral extraction and the last yearly budget reports are available for 2020.

#### **3.1. Fiscal importance of Polish mineral resource taxation**

Polish tax system includes eight taxes that are state revenue. Apart from standard indirect and income taxes, a special category of taxes can be created for taxes put on certain specific sectors. This category of selective taxes includes already

existing in the 1990s indirect tax that concerns hazardous games and direct tax implemented in 2016 that concerns certain financial institutions. The reason for this implementation is similar to the tax on certain mineral extraction – it is to increase share of the financial sector in budgetary expenses. The breakdown of state tax revenues is presented in Figure 1.

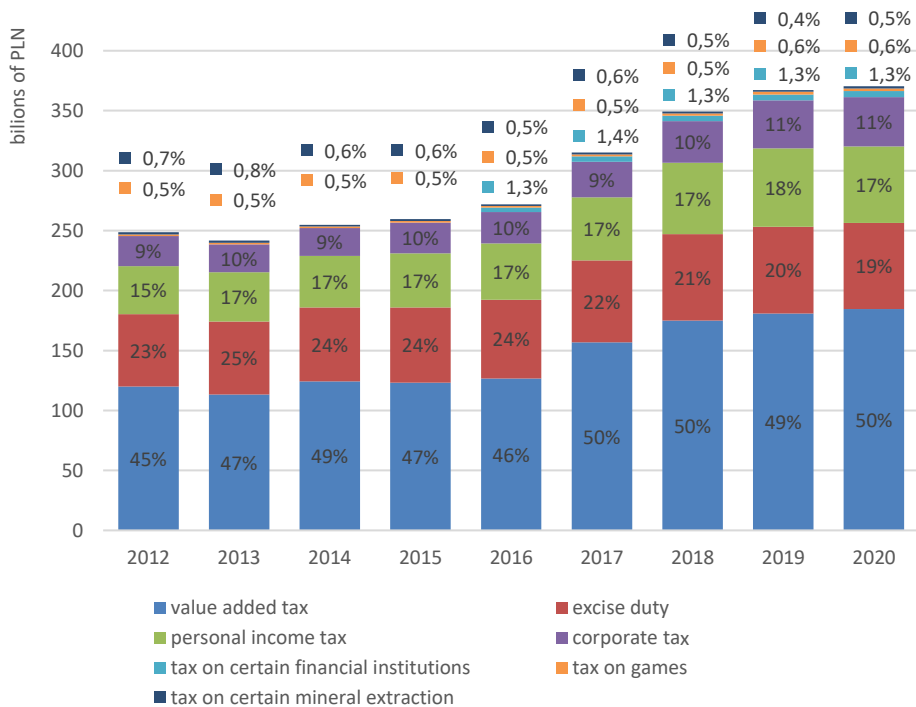


Figure 1. Structure of state tax revenues for 2012–2020

Source: own elaboration based on collected data.

The tax on certain mineral extraction has never provided more than 0,8% of tax revenue, stabilizing in recent years around 0,5%. This makes it almost equal to income received from the tax on games. What is worth mentioning is that since July 2019 the tax on copper and silver extraction has been lowered by 15% and, since November 2019, the tax on gas and oil has been implemented, but there is not much change in the received revenue. Thus, the tax on certain mineral extraction may be considered as non-efficient fiscally. This makes an argument for it being an environmental tax, of which fiscal efficiency is not the main point.



Similar comparison can be made for exploitation levy revenue within the tax income of communities. It is relatively small, as there are eight levies that are only an additional income, from which only three are separately shown in the data as only those creating sufficient revenue, beside two main tax groups. The first one contains the share of income taxes, while the second is composed of seven local taxes (Act of 13<sup>th</sup> November 2003: art. 4). Figure 2 presents these revenues both nominally and as the percent of entire own income of communities (afar from taxes, own income is also property income).

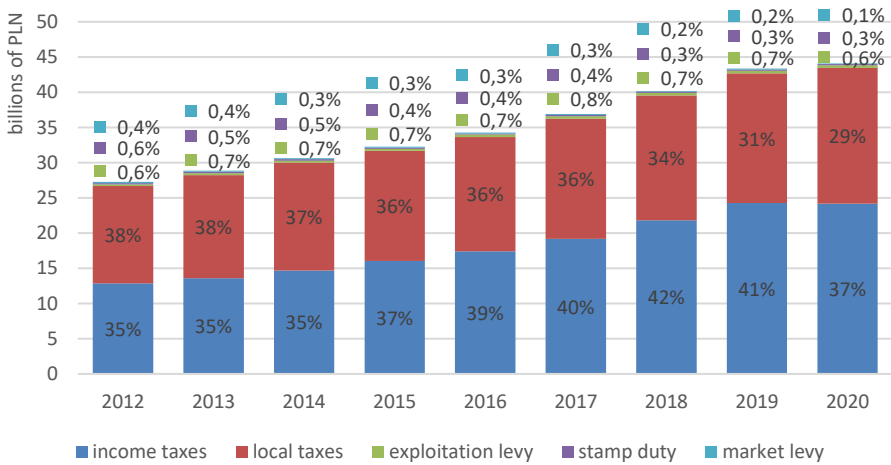


Figure 2. Structure of commuties tax revenues for 2012–2020

Source: own elaboration based on collected data.

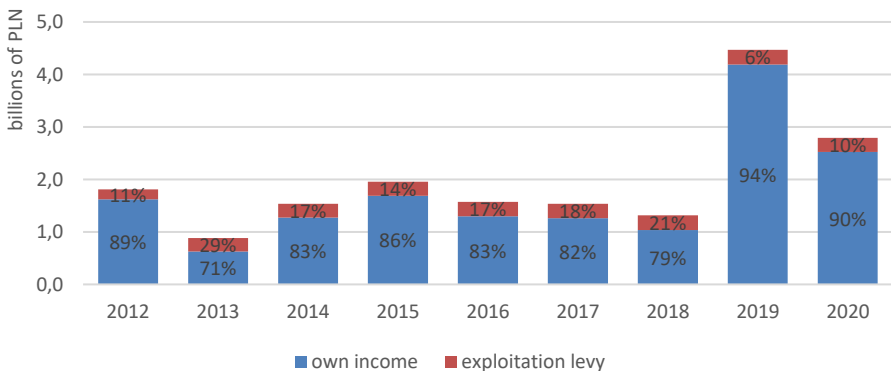


Figure 3. Exploitation levy in NFEPaWM budget for 2012–2020

Source: own elaboration based on collected data.

Although exploitation levy is fiscally marginal for the income of communities in general, it is the most efficient of local levies. It is also worth noting that only 53,3% of all communities receive revenues from it. It is, however, incomplete to only show its imprint on communities' budgets, as in general rule 40% of the revenues goes to NFEPaWM. Figure 3 presents how much of NFEPaWM's own income (excluding subsidies and other category) is exploitation levy.

NFEPaWM's own income, as depicted, consists only of pollution and resources levies and penalties, including exploitation levy which points to it being an environmental revenue. Exploitation levy makes from 6% up to 29% of own income, however, it is worth noting that income of NFEPaWM is irregular.

### 3.2. Mineral resource taxation as part of environmental revenue

As the revenue from levies that is going to NFEPaWM consists entirely of taxes on pollution, it can be suspected that exploitation levy and the tax on certain mineral extraction will have a strong influence on this category of environmental revenues. Figure 4 presents how inclusion of these taxes in environmental tax statistics would change the final result.

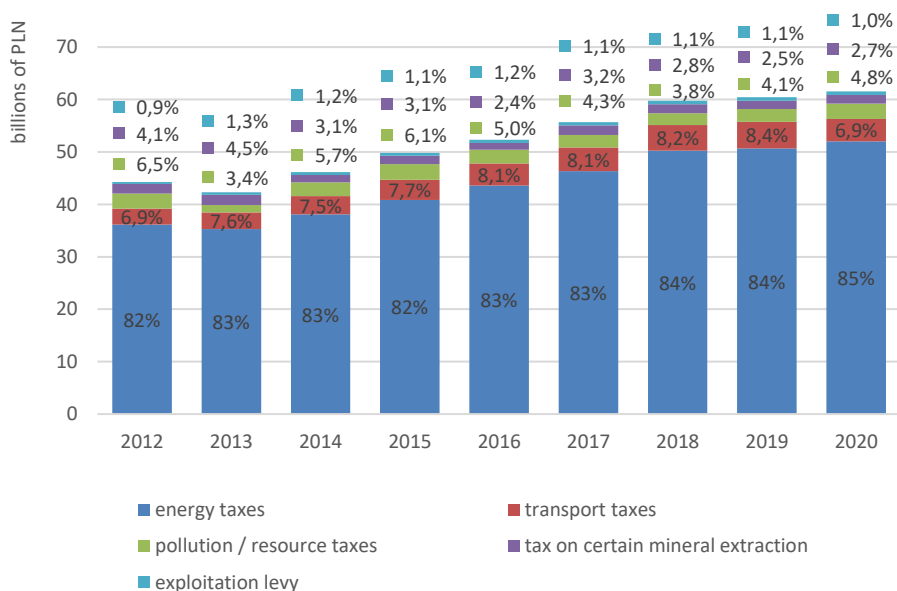


Figure 4. Environmental tax statistic after including mineral resource taxes

Source: own elaboration based on collected data.

Adding mineral resource taxation to environmental data would almost double the amount of pollution and resource taxation revenue. It is noted that in case of environmental taxes the only increase that can be perceived with justified content is their increase in all tax income, which is desired and complies with ecological tax reform (Borys, 2016: 45). Thus, Table 2 presents how values adjusted by mineral resources taxation are in relation to Poland's GDP and state tax income. It also shows how the values changed (in percentage points) compared to original values.

Table 2. Adjusted environmental tax statistics and change in relation to data without mineral resource taxation

2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Environmental tax revenues as % of GDP</b>								
<b>2,73</b> (+0,14)	2,57 (+0,15)	2,70 (+0,12)	2,77 (+0,12)	2,81 (+0,10)	2,80 (+0,12)	2,82 (+0,11)	2,63 (+0,10)	2,65 (+0,10)
<b>Environmental tax revenues as % of budgets tax income</b>								
<b>16,72</b> (+0,83)	17,52 (+1,01)	18,12 (+0,78)	19,19 (+0,81)	19,15 (+0,69)	17,66 (+0,77)	17,11 (+0,67)	16,45 (+0,60)	16,62 (+0,62)
<b>Pollution and resource taxes revenues as % of environmental tax revenues</b>								
<b>11,48</b> (+4,64)	9,15 (+5,57)	9,96 (+4,04)	10,33 (+3,97)	8,56 (+3,41)	8,62 (+4,15)	7,76 (+3,77)	7,72 (+3,49)	8,55 (+3,57)

Source: own elaboration based on collected data.

Adding mineral resource taxation to environmental data shows a small increase of environmental taxes in total taxes received by the state, usually much smaller than 1 pp. Change in the environmental taxes per GDP is marginal (around 0,1 pp.). This is related to energy taxes making up the most efficient environmental taxes. The most significant change is taking place in the structure of environmental tax statistics. Adding mineral resource taxation to pollution and resource taxes would make this category higher than transport taxes<sup>3</sup>.

## CONCLUSIONS

The article provides evidence that environmental revenues data gathered in Poland is incomplete because it does not include a tax on copper and silver extraction, as well as exploitation levy (apart from hydrocarbon exploitation).

There are many arguments presented on the character of exploitation levy and why it should be considered as an environmental tax. These arguments stem both

<sup>3</sup> It would make Poland one of three EU countries with higher pollution and resources tax revenues than transport tax revenues, next to Lithuania and Estonia (www2).

from the literature and environmental law. This levy can also be considered as a tax by its construction which makes it closely related to the also introduced tax on certain mineral extraction – they bear the same traits. The main difference is the states focus on biggest companies in the sector, while exploitation levy is put on every possible mineral extraction making it more general. Additionally, both taxes are making marginal revenue, providing that their main goal is not necessarily fiscal efficiency. Thus, the first hypothesis is true, taxes on mineral resource excavation in Poland should be considered as environmental revenue.

Adding revenue from those taxes to environmental tax revenues shows that the tax on certain mineral extraction and exploitation levy would significantly influence pollution and resources tax values. Although the main part of environmental tax revenues are taxes based on energy, coming up to 85% of environmental revenues in recent years, the entire environmental revenue is only slightly adjusted. This indicates that the second hypothesis: taxes on mineral resource excavation have a considerable value compared to other environmental taxes – is only partially true.

Limitations of the presented article are based on the accessibility of public data which does not provide separate accounts of revenue from hydrocarbon exploitation and other minerals. However, it should be possible for public authorities or statistical office to gather this data, especially for the tax on certain mineral exploitation, as there are different declarations for copper and silver extraction (KOP-MS), as well as hydrocarbon extraction (KOP-RG) (Regulation of 22<sup>nd</sup> December 2015). For exploitation levy this might be possible by calculating income received by districts and voivodeships, as they only receive revenue on hydrocarbon extraction.

## REFERENCES

- Abdelwahed, L. (2020). More oil, more or less taxes? New evidence on the impact of resource revenue on domestic tax revenue. *Resources Policy*, 68. <http://dx.doi.org/10.1016/j.resour-pol.2020.101747>.
- Act of 11<sup>th</sup> September 2019 about cancelling act about special hydrocarbon tax and changing some other laws. *Journal of Law* 2019, pos. 1978.
- Act of 13<sup>th</sup> November 2003 about the income of local government units. Consolidated text. *Journal of Law* 2021, pos. 1672.
- Act of 15<sup>th</sup> February 1992 about corporate tax. Consolidated text. *Journal of Law* 2021, pos. 1800 with later changes.
- Act of 25<sup>th</sup> July 2014 about special hydrocarbon tax. Consolidated text. *Journal of Law* 2018, pos. 2269. Act cancelled.
- Act of 27<sup>th</sup> April 2001 – Environment protection law. Consolidated text. *Journal of Law* 2021, pos. 1973 with later changes.
- Act of 2<sup>nd</sup> March 2012 about tax on certain mineral extraction. Consolidated text. *Journal of Law* 2020, pos. 452 with later changes.

- Act of 4<sup>th</sup> February 1994 – Geological and mining law. Announced text. *Journal of Law* 1994, no. 27, pos. 96. Act cancelled.
- Act of 9<sup>th</sup> June 2011 – Geological and mining law. Consolidated text. *Journal of Law* 2021, pos. 1420 with later changes.
- Andreoni, V. (2019). Environmental taxes: Drives behind the revenue collected. *Journal of Cleaner Production*, 221. <http://dx.doi.org/10.1016/j.jclepro.2019.02.216>.
- Badeeb, R.A., Lean, H.H. and Clark, J. (2017). The evolution of the natural resource curse thesis: A critical literature survey. *Resource Policy*, 51. <http://dx.doi.org/10.1016/j.resour-pol.2016.10.015>.
- Banda, W. (2021). A real options based framework for assessing the international attractiveness of mining taxation regimes. *Resource Policy*, 74. <http://dx.doi.org/10.1016/j.resour-pol.2021.102414>.
- Borys, G. (2016). Oplata eksploatacyjna jako kategoria finansowa. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 437.
- Duda, M. (2013). Podatek od wydobycia niektórych kopalin – nowa jakość w polskim prawie podatkowym. *Ruch Prawniczy, Ekonomiczny i Socjologiczny*, year LXXV – book 1. <http://dx.doi.org/10.14746/rpeis.2013.75.1.9>.
- Durst, M.C. (2016). Improving the Performance of Natural Resource Taxation in Developing Countries. *ICTD Working Paper*, 60. <http://dx.doi.org/10.2139/ssrn.3120472>.
- Eurostat (2013). *Environmental taxes: A statistical guide*. Luxembourg: Publications Office of the European Union.
- Freebairn, J. and Quiggin, J. (2010). Special Taxation of the Mining Industry. *Economic Papers*, 29(4). <http://dx.doi.org/10.1111/j.1759-3441.2010.00085.x>.
- Gu, J. (2018). Mining, pollution and site remediation. *International Biodeterioration & Biodegradation*, 128. <http://dx.doi.org/10.1016/j.ibiod.2017.11.006>.
- Heaps, T. and Helliwell, J.F. (1985). The Taxation of natural resources. In: M. Feldstein, A.J., ed. Auerbach, *Handbook of Public Economics. Volume 1*. Amsterdam: Elsevier B.V.
- Ing, J. (2020). Adverse selection, commitment and exhaustible resource taxation. *Resource and Energy Economics*, 61. <http://dx.doi.org/10.1016/j.reseneeco.2020.101161>.
- Judgment of 13<sup>th</sup> July 2011 by The Constitutional Tribunal, K 10/09.
- Judgment of 15<sup>th</sup> September 1998 by The Supreme Administrative Court in Warsaw, II SA 526/98.
- Judgment of 8<sup>th</sup> November 2016 by The Supreme Administrative Court, II GSK 845/15.
- Justification for the government's act about the tax on certain minerals extraction (2012). Print no. 144: <https://www.sejm.gov.pl/Sejm7.nsf/druk.xsp?nr=144> [Accessed 10.01.2022].
- Kozieł, D., Pawłowski, S. and Kustra, A. (2018). Podatek od kopalin w górnictwie rud miedzi w Polsce i na świecie – analiza porównawcza. *Przegląd górniczy*, 9.
- Kozioł, H., Postrożny, S. and Świdziński, A. (2016). Udział KGHM Polska Miedź S.A. w gospodarce światowej. In: A. Manecki, ed., *Polska miedź i srebro w kopalniach KGHM SA*. Kraków: Wydawnictwa AGH.
- Lund, D. (2009). Rent Taxation of Nonrenewable Resources. *Annual Review of Resource Economics*, 1. <http://dx.doi.org/10.1146/annurev.resource.050708.144216>.
- Małecki, P.P. (2016). Podatek od wydobycia niektórych kopalin jako jeden z rodzajów podatków ekologicznych. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 453.
- Norouzi, N., Fani, M. and Talebi, S. (2022). Green tax as a path to greener economy: A game theory approach on energy and final goods in Iran. *Renewable and Sustainable Energy Reviews*, 156. <http://dx.doi.org/10.1016/j.rser.2021.111968>.
- Ochoł, A. (2021). Wydajność fiskalna podatku od wydobycia niektórych kopalin. In: T. Famulska, ed., *Wydajność fiskalna podatkowych źródeł dochodów budżetu państwa w Polsce*. Katowice: Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach.

- Ofiarski, Z. (2017). Opłata eksploatacyjna jako wspólne źródło dochodów państwa oraz gmin (aspekty normatywne). *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 485.
- Otto, J.M. (1998). Global changes in mining laws, agreements and tax systems. *Resources Policy*, 24(2). [http://dx.doi.org/10.1016/S0301-4207\(98\)00011-7](http://dx.doi.org/10.1016/S0301-4207(98)00011-7).
- Otto, J., Andrews, C., Cawood, F., Doggett, M., Guj, P., Stermole, F., Stermole, J. and Tilton, J. (2006). *Mining Royalties: A Global Study of Their Impact on Investors, Government, and Civil Society*. Washington: The International Bank for Reconstruction and Development / The World Bank. <http://dx.doi.org/10.1596/978-0-8213-6502-1>.
- Parmenter, B., Breckenridge, A. and Gray, S. (2010). Economic Analysis of the Government's Recent Mining Tax Proposals. *Economic Papers*, 29(3). <http://dx.doi.org/10.1111/j.1759-3441.2010.00080.x>.
- Parsons, R.B. (1991). Mining taxes and social policy. *CIM Bulletin*, 84(955).
- Pest, P. (2016). O potrzebie racjonalizacji stawek podatku od wydobycia niektórych kopalnin. *Annales Universitatis Mariae Curie-Skłodowska Lublin – Polonia Section H*, L(1).
- Połączyński, J. (2014). Podatek od wydobycia niektórych kopalnin w Polsce na tle doświadczeń zagranicznych. *Studia Ekonomiczne*, 186(part 2).
- Rakoczy, B., ed. (2016). *Wybrane problemy prawa geologicznego i górniczego*. Warszawa: Wolters Kluwer.
- Regulation (EU) No 691/2011 of the European Parliament and of the Council of 6 July 2011 on European environmental economic accounts. Office Journal of the European Union, L 192/1.
- Regulation of the Minister of Finance of 22<sup>nd</sup> December 2015 on the declaration for the tax on the certain mineral extraction. Announced text. Journal of Law 2015, pos. 2309. Act cancelled.
- Rowse, J. (1997). On ad valorem taxation of nonrenewable resource production. *Resource and Energy Economics*, 19.
- Santana, C.S., Olivares, D.M.M., Silva, V.H.C., Luzardo F.H.M., Velasco, F.G. and de Jesus, R.M., (2020). Assessment of water resources pollution associated with mining activity in a semi-arid region. *Journal of Environmental Management*, 273. <http://dx.doi.org/10.1016/j.jenvman.2020.111148>.
- Szamałek, K. (2005). Analiza funkcjonowania nowego systemu opłaty eksploatacyjnej. *Przegląd geologiczny*, 53(4).
- Tilton, J.E., (2004). Determining the optimal tax on mining. *Natural Resources Forum*, 28. <http://dx.doi.org/10.1111/j.1477-8947.2004.00081.x>.
- [www1] [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:National\\_tax\\_lists\\_20210721.xlsx](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:National_tax_lists_20210721.xlsx) [Accessed 9.01.2022].
- [www2] [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Environmental\\_tax\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Environmental_tax_statistics) [Accessed 9.01.2022].
- [www3] <https://bip.mos.gov.pl/koncesje-geologiczne/raporty-i-zestawienia-dotyczace-udziolonych-koncesji-w-tym-zestawienia-otworow-wiertniczych/raporty-i-zestawienia-rok-2020/raporty-i-zestawienia-grudzien-2020-r/> [Accessed: 15.01.2022].
- [www4] <https://kgm.com.pl/inwestorzy/akcje-i-obligacje/notowania> [Accessed: 15.01.2022].
- [www5] <https://pgnig.pl/relacje-inwestorskie/informacje-gieldowe/akcjonariat> [Accessed: 15.01.2022].

Zakończenie recenzji/ End of review: 27.10.2022

Przyjęto/Accepted: 02.11.2022

Opublikowano/Published: 23.11.2022

# THE CONSUMER LENDING PROTECTION. HOW TO PREVENT THE PREDATORY LENDING AND “DEBT SLAVERY” ON THE SMALL-DOLLAR LENDING MARKET

Zofia M. Mazur\*



<https://doi.org/10.18778/2391-6478.4.36.05>

## Abstract

**The purpose of the article/hypothesis.** The present contribution is focused on the lending market, its credit products, and actors, with particular regard to the non-bank small-dollar lenders and the underserved borrowers. The purpose is to analyze some of the specific small-dollar loans and related legislative initiatives from the American and European financial markets which may constitute remedies to the problem of predatory lending. **Methodology.** The analysis was based on the legal and administrative acts and documents as well as on the doctrine related to the topic examined. **Results of the research.** The study revealed that the misleading, abusive conducts and numerous sales strategies of professionals operating on the banking market may regard almost any individual. These unethical practices have intensified during the pandemic, becoming particularly dangerous.

**Keywords:** financial consumer protection, small-dollar lending, predatory lending, unbanked households, COVID-19.

**JEL Class:** K15, N22, G23.

\* Ph.D. candidate of Law and Protection University of Rome “Tor Vergata”, e-mail: [zofiamaria.mazur@studio.unibo.it](mailto:zofiamaria.mazur@studio.unibo.it)  
<https://orcid.org/0000-0002-0493-1545>

## INTRODUCTION

The financial market is a rapidly transforming sector, especially because of new technology, and entrance of new bank and non-bank competitors. However, what if another unexpected and breakthrough component arrives, such as a global pandemic providing damages which cannot be sized quickly? To protect the financial market actors the governs, competent authorities and supervisors must promptly adjust their strategy to the unforeseen circumstances in order to prevent misconducts of who see these times as an opportunity for abuses and to safeguard both collective and individual interests of participants and regular market competition.

Poverty and financial distress in the era of COVID-19 will desperately aggravate, in some cases going from bad to worse, thus the lack of adequate protection of the community and essential services will become more perceptible and acute.

Nevertheless, it must be kept in mind that the excessive debt levels and over-indebtedness are detrimental not only for consumers. They may endanger the stability of financial institutions, slow down the growth of economy driving it into recession.

The unforeseeable final impact of the ongoing pandemic that is able to lead to the serious delinquency<sup>1</sup> and default rates of Americans have pushed the author of the present paper to reflect on the fate of millions of underserved, low-wealth households and vulnerable consumers.

For this reason, the author has attempted to describe and propose some possible measures that could be taken in the lending market in order to protect debtors against unethical and predatory practices of small-dollar lenders and fly-by-night entities. Those loans providers frequently prey on the consumer vulnerability, illiteracy, inability to assess the risks, and/or temporary arduous financial situation which finally may lead to debt traps, vicious circle of borrowing, financial disasters, serial defaults, over-indebtedness.

### 1. LENDING MARKET ACTORS

On the financial market different financial products providers exist, such as banks, credit unions, financial intermediaries, and many other non-bank professionals. They offer many financial products and services, both secured (usually proposed by traditional banks and credit unions), and unsecured credit products offered by non-banks providers. Frequently, those secured ones are not accessible to every

---

<sup>1</sup> Defined as loans that are already in foreclosure and/or with payments that are 90 days or more late (Apgar and Herbert, 2005).



individual who wished to obtain them. Generally, such products require several financial conditions, such as regular incomes, bank account, adequate credit scores, and so forth. Unfortunately, a lot of consumers are not able to satisfy those specific requests for various reasons. Therefore, they are forced to use available alternatives, which are usually unsecured, high-cost, easier and faster to obtain, credit products offered by non-bank professionals, such as small-dollar lenders.

Generally, regulations related to consumer protection focus on the “average” consumer in the “average situation”, especially in almost all consumer protection laws of the European Union. However, some circumstances may occur which make this average consumer vulnerable. One of such circumstances has already occurred and it is the global pandemic due to the spread of COVID-19. Because of this particular situation, the number of vulnerable and underserved adults will likely increase. The arrival of a fly-by-night professional on the doorstep of a consumer who is facing an overwhelming financial obligation may appear as a “dream come true” (Engel and McCoy, 2002: 1297). Victims of predatory lending are likely to be sympathetic communities that are susceptible to manipulations (Putney, 2003).

The 2019 Study provided by the Financial Health Network affirms that “financially underserved consumers in the U.S. spend \$189 billion in fees and interests on financial products in 2018” (Financial Health Network, 2020a).

The market of short-term and long-term credits is constantly growing. These products continue to dominate the fees and interests paid by subprime customers.

“In 2018, Underserved consumers spent \$66,1 billion on fees and interests for short-term credit products” (Putney, 2003) and \$39.9 billion for Single Payment Credit products.

There are millions of U.S. unbanked and underbanked consumers<sup>2</sup>, it means individuals with a limited access, or with no access, to traditional financial products and services, living paycheck to paycheck. In accordance with the 2019 FDIC Survey (2020: 4) 50.4% of unbanked household in 2019 had previously been banked, slightly higher than in preceding years.

Then, there is also a huge segment of customers who display one or more characteristics of vulnerability<sup>3</sup>. Several studies revealed that consumers of high-cost loans are disproportionately African Americans, Hispanics and low-income households (Guedj, 2019; Apgar and Herbert, 2005). All of these groups are often

---

<sup>2</sup> The FDIC indicates, in the 2017 National Survey of Unbanked and Underbanked Households, that 6,5% of households in the United States were unbanked in 2017 (this is approximately 8.4 million households). The Survey on Household Use of Banking and Financial Services of 2019 shows that about 5,4% of American households were unbanked in 2019 (this is approximately 7.1 million). The 2019 unbanked rate is the lowest since the survey began in 2009.

<sup>3</sup> The Financial Health Network’s 2019 U.S. Financial Health Pulse find that about 178 million adults are Financially Coping or Vulnerable.

a favorite target of non-banking lenders, such as dangerous fly-by-night entities and rapidly growing Fintech companies. Such loan providers have their own strategy to find and identify specific individuals who are already facing financial distress or who are going to face it. Stegman and Faris (2003) noted that payday lenders take many efforts to transform more and more also occasional clients into chronic borrowers.

Locating vulnerable individuals and procuring relevant information is becoming progressively sophisticated. The loan providers consult various local and municipal registers, track people online<sup>4</sup> and via mobile phones (Willis, 2017), they send unsolicited checks (Engel and McCoy, 2002), credit cards or other apparently attractive proposals to potential borrowers. In the storefront, lenders very often generate a psychological pressure on customers by creating a false sense of urgency or the impossibility of finding any other option, in order to move them quickly to accept onerous terms and conditions.

No lender should be allowed to exploit the vulnerability, the weaknesses, the bounded rationality, the lack of access to financial advice, the unforeseen need or the financial hardship of borrowers. Now more than ever, the solid understanding of consumer financial vulnerabilities and market actors' reactions are vital.

## 2. EXAMPLES OF SMALL-DOLLAR LOANS

Loans are credit products which allow individuals to buy goods and pay for services that they would not be able to immediately pay for in full, such as high unexpected bills, car reparations or new appliance.

Small-dollar loans are short-term, high-rates loans, such as a payday loan, a vehicle title loan, a pawnshop loan. Traditionally they are offered by storefront lenders, however many of them are available also online<sup>5</sup>.

These kinds of credits are quite easy to obtain<sup>6</sup> and they are generally targeted at consumers with low incomes who take them out for unexpected and recurring expenses, such as regular expenses (utilities, car payments, credit card), mortgage instalments and food. In general, in order to obtain a small-dollar loan, the consumer should have a deposit account with a bank or credit union. However, “there is an emerging trend in favor of offering payday loans to customers without bank accounts” (Miller, 2019). In the case of pawnshop loans and vehicle title

---

<sup>4</sup> “Even if you never hit *Submit* to complete the transaction, your information can be captured through keystroke logging – a program used to see and store everything you enter on application” (Federal Trade Commission, 2021).

<sup>5</sup> For more detailed information, see Chen (2020).

<sup>6</sup> In some EU countries, such as Estonia, Finland, Sweden, they are granted via text message, so-called “SMS loans” with a credit decision available almost instantaneously, and which the average APR is about 2000%.

loans the problem does not even arise. Consumers are not required to demonstrate a regular income or possession of a bank account, as these loans are secured by collaterals. Consumers pledge a tangible personal property which is almost always worth more than the amount of loans received<sup>7</sup>. For this reason, they are more accessible, especially to subprime borrowers. Because of the pledge, there is a strong incentive to pay the borrowed sum back (Miller, 2019).

Some of them are exorbitantly expensive and have a dangerous structure that may entrap consumers in a spiral debt (National Consumer Law Center, 2014). Sometimes when a debtor seems more likely to default the lender charges a higher interest rate<sup>8</sup>. In other words, the higher the risk, the higher the interest rate, and as someone said: “being poor is expensive”.

The small-dollar lending consists of borrowing a lump sum disbursed usually in cash. Most of them are around \$100 to \$500 and have finance charges of \$13–\$20 per each \$100 borrowed over a 2-week period. Their APR can range from 300% to 600%<sup>9</sup>. Borrowers must repay the loan quickly in a one balloon payment.

These loans rely on high interest rates and intimidating practices to ensure the lender’s possibility to collect the debt rather than the borrower’s ability to repay.

The largest categories of short-term loans are those called “payday loans” (Consumer Financial Protection Bureau, 2020). In the case of a payday loan, the moment of repayment usually coincides with the consumer’s next payday. In this particular loan, the borrower must guarantee repayment and can do so by providing a post-dated check or authorization for ACH. If a consumer is unable to repay the loan at the agreed-on date, she/he may rollover the credit for an additional fee<sup>10</sup>, take out another loan to cover the previous one, or simply default on the loan.

On the other side, there are installment loans, in which a lump sum borrowed is paid back in a series of regular payments. This kind of loan may be repaid over longer periods of time.

Financial products and services offered by traditional banks usually have much lower interest rates than small-dollar loans, however they are not provided to low-income, high-risk population that may not be able to repay.

In recent years it is visible that consumer lending grows faster than consumption. Skiba and Tobacman (2019) in their research suggested that payday loan borrowers are very often financially stressed. Moreover, they have a persistent demand for credit, so, having discovered a place where the loan is

---

<sup>7</sup> Prager (2009) found that the offered loan ranges from 25% to 65% of the expected resale price of the asset provided by the borrower.

<sup>8</sup> Several studies have found that subprime lenders charge higher prices in minority neighborhoods, with high concentration of African American and Hispanic.

<sup>9</sup> In the U.K. market lending providers charged 5853% APR, see Evans (2013).

<sup>10</sup> Successive rollover of the initial loan increases the APR.

available, they return frequently. The 2019 FDIC Survey (2020: 4) reported that “use of the mobile banking as a primary method of account access in the past 12 months continued to increase sharply (from 9.5 percent in 2015 and 15.6 percent in 2017 to 34 percent in 2019)”. Finally, we arrive to the ever-increasing FinTech. Through few clicks on screens the emerging online Fintech lending facilitates the access to credit products which may have dire consequences for Americans consumers.

### **2.1. The *Peanut effect* of small-dollar credits**

Several scholars have shown that many borrowers do not know or understand the difference between different kinds of loans, sometimes underestimating the true cost of borrowing, their future income, or their ability to repay. Such behavior can be a symptom of the *peanut effect* (Markowitz, 1952; Prelec and Loewenstein, 1991), “whereby people do not consider the consequences of a small dollar transaction because small amount of money is *peanuts*” (Bertrand and Morse, 2011). It is something like a “smoking cessation method of getting a smoker to think about not just the next cigarette, which would have only a marginal effect on one’s health, but instead about the next year of cigarette smoking” (Bertrand and Morse, 2011).

They do not comprehend the potential benefits and risks of different types of credits. Even worse, if the benefits of the acquisition of financial products are unclear or obfuscated.

Moreover, studies conducted by The Pew Charitable Trust (2012) and by Bertrand and Morse (2011) show that consumers confuse \$15 payday loan fee per \$100 borrowed vs. 15% Annual Percentage Rate, saying that the APR on a payday loan is 15%, or when deciding they focus more on the fee rather than on the whole repayment.

### **2.2. The *Quicksand effect* of small-dollar credits**

Since borrowers often do not consider small-dollar loans as another bill and they only focus on short-term emergency needs, these credit products become a sort of quicksand. Consumers who face a problematic repayment situation, due to obligation to cover the unaffordable loan payment, ask for another loan to repay the previous one. The reborrowing can finally lead to default and delinquency.

One of the main problems of small-dollar loans is the fact that the access to them is much easier than to instalment secured loans. But on the other hand, individuals with low income, poor creditworthiness and/or existing debts generally have difficulties in obtaining a long term-installment loan. Nevertheless, borrowers

are frequently unaware about available safe alternatives that could enable them to afford a more expensive purchase or avoid high risks and financial distress.

Lenders often take advantage of lack of awareness, information asymmetries, disparity in bargaining power and, in particular, of the arduous situation of the consumer worried about his/her ongoing financial hardship. As a result, the violation of the general clause of “fairness in relations with customers” very often leads to the sale of unsuitable, inappropriate, disadvantageous and/or dangerous financial products.

### **2.3. The costs of the loans, risks and compliance**

Small amounts of credits are generally expensive because of the fixed costs of loans and high risks of a borrower’s default. As mentioned above, frequently lenders charge higher interest rates to low-income consumers (subprime borrowers).

Nevertheless, EFIN (2018) noted that rolling over or taking out a new loan by the same borrower generate more revenue for the payday lenders and are cheaper, just because of the lower operating costs.

According to the current legal situation, 16 States and the District of Columbia prohibit high-cost payday loans (CFA, *Payday...*). However, there are several scholars suggesting that a definitive ban on payday lending may be detrimental to consumers too. Such bans do not keep consumers from borrowing, they only push them towards illegal credit sources or into worse markets with products that are less advantageous (Mann and Hawkins, 2007). Reports have shown that many borrowers turn to pawnshop loans considering them as a complementary to payday loans, otherwise they use other high-interest credits, such as overdraft or bounced checks, where possible (Bhutta, Goldin and Hamonoff, 2016).

Furthermore, the access to the potentially harmful payday loans and other small-dollar loans could also be beneficial for consumers who has unforeseen, discrete and short-term needs (e.g. unexpected expenses<sup>11</sup>), but only if they are able to successfully avoid long sequences of loans, as suggested by the Consumer Financial Protection Bureau (2020).

The use of payday loan in a responsible manner, as an alternative to even higher-cost credit products or the failure to pay certain bills, can be beneficial (Campbell et al., 2011). Moreover, successful repayments of short-term credits can also improve a borrower’s credit score. And on the contrary, if loans are

---

<sup>11</sup> Community Financial Service Association of America (2006) argues that some unforeseen expenses, such as the restart of an unexpected interruption of electricity can cost more than a payday loan fee. The advocates of payday loans affirm that these loans can be cheaper than paying overdraft fees to the bank (EFIN, 2018).

misaligned, unsecured or misused providing to a debt burden, they become detrimental rather than beneficial for borrowers.

In conclusion, on the one hand, legal restriction regarding interest rate cap can reduce the risk of unequal charge of high interests. But on the other hand, the restrictions and usury rules may misrepresent the real price of loans by hiding charges and fees, decrease competition in the market and consequently reduce the products available or the process of their innovation, they may even preclude the access to underserved borrowers to the market. Alternatively, the imposition of rate caps may lead to the creation of new products or practices that evade the legal norms or lead consumers to obtain other even less-attractive short-term loans (Campbell et al., 2011).

It also must be kept in mind that high compliances costs and low revenues may (and actually frequently do) drive banks, credit unions and non-banks out of some segments of a retail business.

### **3. ELIMINATION OF THE CONTROVERSIAL UNDERWRITING REQUIREMENTS**

In accordance with the section 1031(b) of the Dodd-Frank Act<sup>12</sup> the Consumer Financial Protection Bureau “may prescribe rules applicable to a covered person or services provider identifying as unlawful unfair, deceptive, or abusive acts or practices in connection with any transaction with a consumer for a consumer financial product or services, or the offering of a consumer financial product or services”.

Section 1031(d)(2) of the Dodd-Frank Act specifies what should be considered as an abusive act or practice. In particular it occurs when it takes unreasonable advantage of: (1) a consumer’s lack of understanding of the material risks, costs, or conditions of the product or services; or (2) a consumer’s inability to protect the interest of the consumer in selecting or using a consumer financial product or service.

Therefore, after long public consultations, in 2017 CFPB published the Final rule establishing consumer protection regulations for payday loans, vehicle title loans and certain high-cost installment loans. The protection of consumers in question should have been founded, in particular, on the so-called Mandatory Underwriting Provisions, which is regulated by the following provision:

“§1041.4 Identification of unfair and abusive practice

It is an unfair and abusive practice for a lender to make covered short-term loans or covered longer-term balloon-payment loans without reasonably determining that the consumers will have the ability to repay the loans according to their terms.

---

<sup>12</sup> H.R.4173 – 111<sup>th</sup> Cong. (2010).

(2) A lender’s determination of a consumer’s ability to repay (...) is reasonable only if based on the calculation of the consumer’s debt-to income ratio” or residual income “for the relevant monthly period and the estimates of the consumer’s basic living expenses for the relevant monthly period”.

However, as we can notice, these rules impose a number of burdensome and expensive procedural requirements on small-dollar lenders which preclude a fast and easy access to many low credit score borrowers to these products. Such circumstance can make the situation even worst, because those who seek this specific kind of loans are very often in financial distress focusing principally on quick, easy approval and application.

In accordance with the abovementioned provision, the loan providers should have obtained many written statements and reports, collected and reviewed several information about incomes, housing expenses and consumer’s borrowing history from the own and other lenders records, in order to proof that borrowers would be able to repay the contemplated loan within maximum 45 days. Such compliance procedures should have been similar to those conducted by banks during the mortgages loans proceedings if the regulation had been entered in force.

Initially, the Bureau believed that the burden regarding the determinations about the consumer’s ability to repay a loan could be deterrent for lenders from offering unsafe, harmful and/or risky products.

However, in 2019, the CFPB publicly affirmed they would provide some modifications to the 2017 Final Rule. Finally, in July 2020 the Bureau admitted that it has determined that the grounds provided in the 2017 Final Rule do not support its determination that the identified practices are unfair and abusive (Consumer Financial Protection Bureau, 2020). Thus, the Bureau noted that the Mandatory Underwriting Provisions are not supported by any appropriate legal basis.

In other words, CFPB affirmed that earlier rule did not satisfy standards provided by the Dodd-Frank Act’s definitions of unfairness and abusiveness.

For this reason, and in order to guarantee access to the small value credits to unserved and unbanked consumers, on July 7, 2020, the CFPB has revalued its previous conclusions and rescinded this most discussed restriction about onerous ability-to-repay provisions that set requirements that no lender could satisfy.

As it has been noted by Kathy Kraninger, Director of CFPB, “that tough underwriting requirements would cut off access to credit, leaving low-income borrowers with few options for fast cash” (American Banker, 2020b). The CFPB has arrived at the conclusion that the countervailing benefits to consumers and competition in the aggregate from the practice in question would outweigh any relevant injury. Moreover, the Bureau believes that “with the elimination of the Mandatory Underwriting Provision, some borrowers who would be able to reborrow the full amount of the initial loan may avoid a default that would have occurred if lender had to comply with the Mandatory Underwriting Provision” (Consumer Financial Protection Bureau, 2020: 212).



Thus, the failure to determine the consumer’s ability to repay will no longer be considered as an unfair and abusive practice. However, the Payment Provisions of the 2017 rule remain intact.

Although this presumably rational modification, there are many criticisms regarding the elimination of the Underwriting Provision, for instance the Financial Health Network said that the decision to abandon this Rule “is at odd with the Interagency Principles, which we believe are a step in the right direction. This decision also comes at a time when consumers are at their most vulnerable due to the Covid-19 Crisis” (Financial Health Network, 2020b).

On October 29, 2020, the National Association for Latino Community Asset Builders filed a lawsuit in D.C. Federal Court (Responsible Lending, 2020) against the CFPB asserting that “the Repeal Rule invents a new evidentiary standard – distinct from any statutory requirement – and changes the CFPB’s interpretation<sup>13</sup> or application<sup>14</sup> of the statutory definition of unfair and abusive. (...) The CFPB also used an arbitrary truncated analysis, confined in most cases to data from the Payday Lending Rule. (...) The Repeal Rule unreasonably ignores<sup>15</sup> or dismisses available data and research”. Thus, the “Repeal Rule is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law” (Responsible Lending, 2020). Moreover, the Association asserted that the explanation provided by the CFPB regarding the Repeal Rule is a pretext for a desire to serve small-dollar lenders, contrary to the statutory mission of the Bureau. For these reasons, the Plaintiff requested the Court to declare the Rule in question unlawful, set aside it and order the CFPB to take necessary steps to implement the 2017 Final Rule.

As a counterreaction the CFPB filed a motion to dismiss plaintiff’s complaint for lack of subject-matter jurisdiction. In January 2022 the United States District Court for the District of Columbia granted the motion<sup>16</sup>.

#### 4. INTERAGENCY STATEMENT FOR RESPONSIBLE SMALL-DOLLAR LENDING

The unfolding COVID-19 situation have had and still may have disastrous impact on consumer financial well-being, particularly on the unbanked and underbanked population. The joblessness<sup>17</sup> or the reduced incomes can increase the poverty and

<sup>13</sup> The Repeal Proposal “reflected the CFPB’s earlier conclusions but changed the wording to be more favorable to the proposal’s goal”. (Complaint, p. 15).

<sup>14</sup> “The CFPB uses the standard to undermine the identification of the unfair and abusive practice, not to adjust a remedy” (p. 24).

<sup>15</sup> As it has been pointed out “a CFPB official testified to Congress that the CFPB had not conducted any new research to justify the Repeal Proposal. The Repeal Proposal did not even reference recent internal CFPB supervisory or enforcement data” (Complaint, p. 14).

<sup>16</sup> NALCAB v. CFPB No. 1:20-CV-03122 (APM).

<sup>17</sup> According to the survey conducted by the Federal Reserve Board, just in March 2020 13% of adults lost a job, and 6% had their work hours reduced or took unpaid leave. 18% of adults “did



financial straits. In turn, these circumstances may lead to insolvency, over-indebtedness, ever-rising number of suicides<sup>18</sup>, family problems, homelessness, social (Civic Consulting of the Consumer Policy Evaluation Consortium, 2013) and financial exclusion<sup>19</sup>, public disorders, and finally crimes. Thus, as we can see, the problem interest and have an impact on all of us.

In such circumstances, many consumers are forced to use a payday loan and other small-dollar loans because banks do not provide them and/or are easier and faster to obtain (Bhutta, Goldin and Hamonoff, 2016). As it has been highlighted by FDIC “many consumers turn to payday loans and overdraft programs because these products are easily accessible and generally more widely promoted than other more traditional, affordable loans” (Federal Deposit Insurance Corporation, 2007).

However, there are evidence that the bank and credit unions would be able to offer small loans at lower prices than those of payday and other similar lenders. “The cost of capital for banks and credit unions is the lowest of any provider, and their overhead costs are spread among the multiple products they sell” (The Pew Charitable Trust, 2018). According to their studies, the average payday borrower takes out a \$375 loan over five months of the year and pays \$520 in fees, while traditional financial institutions could lend the same amount over five months charging less than \$100 of fees.

For these reasons and in response to the pandemic, on March 26, 2020, the five federal financial agencies<sup>20</sup> published joint statement (FDIC, Press Releases, *Federal Agencies Encourage...*) in order to encourage banks and credit unions and other financial institutions to offer responsible small-dollar loans to consumers and small business in response to COVID-19.

The agencies realized that well-designed responsible small-dollar products can play a significant role by helping people in need satisfy some urgent expenses or alleviate a difficult financial situation due to income disruptions during difficult pandemic period.

Since the interest rates for consumer loans applied by secured financial institutions are lower than either payday lenders or pawn shops, the small-value

---

not expect to be able to pay all of their April bills in full. Among those who lost a job or have their hours reduced, 35% did not expect to be able to pay all bills in full” in Board of Governors of the Federal Reserve System, 2020; see also: The New York Times.

<sup>18</sup> For more accurate information about the relationship between insolvency and physical and mental health problems, see Fitch et al., 2011; Sweet, Kuzawa and McDade, 2018.

<sup>19</sup> “[In] Finland concern was raised that the use of high-cost SMS loans will lead to long-term exclusion from mainstream financial services in the future as many young people are unable to sustain their payments” (Reifner, Clerc-Renaud and Knobloch, 2010: 125).

<sup>20</sup> The Federal Reserve Board, the Federal Deposit Insurance Corporation, Consumer Financial Protection Bureau, the National Credit Union Administration, and the Office of the Comptroller of the Currency.

credits provided by traditional banks are susceptible to be successfully paid back in time.

On May 20, 2020 (FDIC, Press Releases, *Federal Agencies Share...*), regulators issued core lending principles for offering short-term small-dollar credits called “Interagency Lending Principles for Offering Responsible Small-Dollars Loans”. In accordance with the provided principles, responsible lending shall be consisted of fair commercial practices, such as the clear disclosure of contractual terms and conditions, the correct assessment of consumer’s profile, risks and possible defaults, the fairly use of new technology and alternative underwriting information, the development of procedures that could support borrowers “successful repayment of principal and interest/fees in a reasonable time frame rather than reborrowing, rollovers, or immediate collectability in the event of default” (Interagency Lending Principles for Offering Responsible Small-Dollars Loans, 2020: 3). In other words, the credit products should be offered in a manner in which they offer consumers a meaningful possibility to repay based on their financial situation.

Secured small-dollar credits should balance the customers’ need to borrow quickly with fundamentals of responsible lending. Thus, the lenders should act not only in their own interests, but they should take into consideration the borrowers’ needs and interests as well. The fair, transparent and equal treatment shall occur both at pre-contractual and post-contractual stages of loan relationship. In addition, loan costs should respect pertinent state and federal laws in force.

An interesting and good structured example is the “Simple Loan” offered by U.S. Bank which is provided to checking customers of the bank in order to borrow up to \$1.000. Despite the possibility to obtain the credit via online banking platform or mobile phone (which reduces both costs and time), the repayment of the loan occurs in three monthly payments. Moreover, every \$100 borrowed costs \$12 or \$15 of fees depending on the modality of repayment, it means that the APR of the loan is about 71% which is almost six times lower that average payday loan rates. It seems that banks and credit unions are now well informed and equipped to retail small amount of credits in a responsible and affordable manner to consumers in need who used high-cost loans until now, such as payday loans, pawnshop transactions or vehicle title loans.

The supervised financial institutions should compliance and manage the risks related to the development or improvement of the products they offer. The underwriting process should reflect any prudent and rational policy and practice regarding responsible lending. All the activities shall encourage fair treatments of consumers and fair access to financial services in respect of the applicable laws and regulations.

As it has been already mentioned before, the high-quality, affordable and safe small-dollar loans that support repayment can build a positive credit history, since credit scores influence many aspects, such as insurance rates, rent apartments, employment, mortgages' possibilities, and following.

## 5. POSSIBLE REMEDIES TO PUT IN PLACE

As we could notice, there are numerous predatory and unethical conducts of professionals in the financial market. Now more than ever, these unfair and aggressive practices should be monitored and punished. Nonetheless, there are many preventive tools which could be put in place in order to anticipate the consumer harm in the lending market.

- Regulators shall **continue to encourage banks**, credit union and other financial institutions to offer responsible small-dollar loans (American Banker, 2020a) in order to increase access to fair and affordable credit products;

- **Create and promote alternative products** (The Pew Charitable Trusts, 2018; The Pew Charitable Trusts, 2019), because the “just say no” option does not constitute any valid alternative if an individual has no other possibility to borrow money (eg from family or friends). In fact, many argue that borrowers shall be personally responsible for their financial decisions. That could be an acceptable argument only if consumers, especially the vulnerable ones, have a free choice as to the credit products or at least their terms and conditions. Moreover, it is worthily stressed that individuals are likely to take more risks under pressure, in situations of uncertainty or persistent distress. In some cases, an alternative product to payday loan could be the specific kind of loan existing in Italy called *Cessione del Quinto* (a salary or pension secured loan which cannot exceed one-fifth of the monthly income). In the *Cessione del Quinto* an employer, every month, holds back a portion of employee's wages to repay his/her creditor. The loan contract must be secured by a payment protection insurance policy that insures the repayment of loan in case of death, unemployment, disability or temporary incapacity;

- **Replicate**, where possible, the recent successful experiences from Colorado, Ohio<sup>21</sup>, Hawaii, and Virginia<sup>22</sup>, regarding their reforms on small-dollar lending. For instance, under Virginia, Hawaii<sup>23</sup> and Ohio statues all high-interest rate lenders (both those in-store and online) must acquire a license. The Virginia Bill sets the duration of small-dollar loans at a minimum of four months and a maximum of 24 months. Loans sold without a license or using evasive practices

<sup>21</sup> See The Ohio Fairness in Lending Act, H.B. 123 (2018).

<sup>22</sup> See The Virginia Fairness in Lending Act, H.B. 789/S.B. 421 (2020). For more details, The Pew Charitable Trusts (2020).

<sup>23</sup> See H.B. 1883/S.B. 2587 (2020).

will be void and uncollectible. Total cost of a loan may not exceed half of the principal;

– **Control over unsafe financial products** (Bar-Gill and Warren, 2008), their distribution<sup>24</sup> and “unfair credit relationship”.

The predatory and unethical professional conducts should be monitored and punished. In some European Union countries, National Competent Authorities try to discourage non-suitable financial products. Belgium, France, the UK and the Netherlands have introduced laws “to limit the products that they have classified as toxic<sup>25</sup>” (European Commission, 2018: 113). In Denmark, a particular system of product labeling using a traffic light technique has been introduced, marking each financial product with a red, yellow or green color depending on its complexity or risk level;

– **Saving Planner.** In order to increase saving and improve the management of borrowers’ day-to-day finances, the idea developed by Bertrand and Morse (2011) seems particularly interesting. During their research, academics have proposed a so-called self-control treatment via a savings planner. Such savings planner shall contain a non-exhaustive list of “possible daily or weekly expenses<sup>26</sup> that a borrower could cut back on to enable saving for the repayment of the payday loan” (Bertrand and Morse, 2011: 1874).

We can compare it to the situation in which we want to lose some weight and start a healthy diet. To do so, dieticians and/or personal trainers ask us to list every single drink and food we consume throughout a day in order to make us and especially them aware of our daily calorie intake.

We often tend to underestimate our daily/weekly/monthly spending (as well as food and drink consumptions). The aims should therefore be to make people reflect about their habits. Providing some small daily or weekly changes could facilitate saving over time and consequently adjust our budgets. Since it does not require any additional cost, the author of this paper believes that such a savings planner shall accompany every loan agreement. The results could be that some borrowers may decide to moderate the amount or the frequency of a high-cost loans, may decide not to take them at all or abandon the idea of potential rollover.

<sup>24</sup> For instance, as the Recital 26 of the European Consumer Credit Directive (Directive 2008/48/EC) states: “Member States should take appropriate measure to promote responsible practices during all phases of the credit relationship, taking into account the specific features of their credit market. Those measures may include, for instance, the provision of information to, and the education of, consumers, including warning about the risks attaching to default on payment and to over-indebtedness. In the expanding credit market, in particular, it is important that creditors should not engage in irresponsible lending or give out credit without prior assessment of creditworthiness (...)”.

<sup>25</sup> For an interesting explanation about the concept of toxicity, see Jérusalmy, 2020.

<sup>26</sup> Such as eating out with friends or family, cigarettes, alcohol, tickets for lottery, cinema and other entertainments, shoes, clothes, beauty products and services, video games, and so on.

Others may find that some of their expenses are unreasonable, unaffordable or simply unnecessary, consequently they may limit certain services, activities or purchases, which could make them behave in a more financially responsible and prudent manner.

– Application of a sort of the “**Duty of Suitability**”<sup>27</sup> to the small amount credit products, which asks for a case-by-case assessment of appropriateness. In the European Union, such duty is considered as a one of the principles of responsible lending (Financial Services User Group, 2019);

– **Control over and ban inappropriate**, complex<sup>28</sup> product design, misleading advertising, unsolicited credit offers<sup>29</sup> and unsold cross-selling, which primarily benefits the lender and increases the total cost of credit. Ensure that customers have sufficient time to analyze the offer and their financial abilities. Furthermore, the information given to consumers shall be clear, fair and not misleading to enabling them to make conscious, sound and responsible loan decisions. The attention shall be focused also on the modern communication techniques<sup>30</sup>, such as accompanying images and videos;

– **No multiple loans**, borrowers should not have any possibility to take out more than one small loan at a time, neither from the same lender nor from different ones;

– **Include all fees and charges** (comprise those related to late repayment or defaulting) **in the rate cap** for both closed-end and open-end credit (as proposed by National Consumer Law Center, 2019);

– **Adequate disclosure**, it means that it is not sufficient for the consumer to know that one day he or she might face a financial distress. The consumer must be fully aware that the financial problems are highly possible and directly related to the financial product or service which he/she is buying at that moment. Therefore, the credit products in question can effectively trigger the ever-rising sea of debt, the garnishment, the loss of possession of a vehicle or other pledged collaterals, over-indebtedness, and so on (like a packet of cigarettes or drugs that contain a warning about side-effects). In other words, the information provided to borrowers shall be very explicit about the consequences of defaulting, the penalty

---

<sup>27</sup> For different but interesting opinion of the application of the duty of suitability in lending market, see Putney, 2003: 2128–30.

<sup>28</sup> “Firms build complex products not merely to satisfy diverse consumer preferences, but also to confuse consumers and raise the cost of comprehension high enough that consumers will not bother to spend the time and effort that would be required to eliminate confusion” (Willis, 2017: 79).

<sup>29</sup> For instance, “in Belgium, unsolicited marketing is strictly regulated – it is forbidden, among others, to set up credit sales desks in public places such as railway stations, shopping centers” (Financial Services User Group, 2019).

<sup>30</sup> “The effective modern communication techniques are often emotion-based and targeted, segmented by detailed personal characteristics, sometimes right down to the individual consumer” (Willis, 2017: 81).

fees and charges which consumer may have to bear in case of delinquency. In this matter, the more stringent rules on advertising claims are desirable, for instance by using, in a storefront or on the website, particular slogans, such as “borrowing money also costs money”;

– **The duty to treat and deal fairly** in respect of general rules of good faith and good conduct, in particular in payment difficulty.

In Belgium courts, the concepts of *bona fide* in contractual relationships to avoid consumer over-indebtedness have been used. In particular, they “have held that credit providers violate this requirement to enter into *bona fide* contracts if they lend money to people who, at the outset of contract, cannot reasonably be expected to maintain the payments” (Reifner, Clerc-Renaud and Knobloch, 2010).

In the UK and Finland lenders are obliged to consider how they can help consumers with debt problems. In Code of Conducts for creditors in the Netherlands there is a provision regarding “the amount of money that should be left following credit repayments to meet essential household expenditure” (Reifner, Clerc-Renaud and Knobloch, 2010: 117).

The 2017 Payday Loans rule of CFPB has already contained a similar provision:

“(…) in addition to considering the information collected about income and major financial obligations, lenders must reasonably estimate an amount that the borrower needs for basic living expenses. They may do this in a number of ways, including, for example, collecting information directly from borrowers, using available estimates published by third parties, or basing estimates on their experience with similarly situated consumers”.

Additionally, in Germany, Estonia and Italy there is a legal provision which considers given contract void<sup>31</sup> due to insincere purpose of one party and the usage of the urgent needs of the other party, if one party knew or should have known about a specific circumstance. This contractual sanction is provided in order to avoid the intention to take advantage of the weakness of the party in need.

– **Provide some aids** in order to defer loan payments temporarily<sup>32</sup> or insert into the contract a Hardship Clause, which permits a “credit repair”, it means a renegotiation of the contractual terms and conditions;

<sup>31</sup> Articles 1447 and 1448 of the Italian civil code regulate the so-called *rescissione del contratto*.

<sup>32</sup> Such as the Bill no. 2501 in California which enacts the COVID-19 Homeowner, Tenant, and Consumer Relief Law of 2020; the Minnesota Bill H.F. 1507 which establishes the COVID-19 Economic Security Act. The subd. 2 of the section 3 of the Bill regulates the repayment terms during public health emergency by extending the repayment period. In particular, the Bill allows the borrowers to repay the loans in equal installments over a period of 12 months. The loans sold in the violation of the section 3 are void and unenforceable against the borrower.; The Missouri Bill H.B. 1438 proposes modifications to the law relating to unsecured loans of \$500 or less. The bill lowers

- **More digitalization** to reduce costs incurred by the lenders. In turn, lower costs may foster product innovation and competition;
- In some cases, and when it is convenient **the principle of unconscionability** provided by the Uniform Commercial Code may be applied to the aggressive or deceptive credit contracts (Engel and McCoy 2002);
  - Despite the fact that financial education is important and helpful, many researchers stress that it is not sufficient to end predatory lending (Putney, 2003). As it has been pointed out by Engel and McCoy (2002), “reaching the potential victim of predatory lending is the biggest challenge for any educational campaign (...) there is no guarantee that the individuals will understand the information or be able to apply” (Engel and McCoy 2002: 1309-1310). Moreover, many borrowers, in serious financial straits facing a particular need, may not be even concerned about some specific data, facts and terms regarding their loan agreement;
  - **Award premiums for good conducts** – i.e., for better disclosure, because as it has been highlighted by many studies, the credit product and service providers can be the most efficient supplier of information which consumer needs in order to make safe and sound financial decision (Willis, 2017; Campbell et al., 2011). The firms are better situated than regulators to achieve consumer comprehension by informing adequately their clients (Willis, 2017). Nevertheless, understanding is not a panacea, the bad decisions can be made also by well-informed and experienced individuals, as a result of lack of bargaining power, distraction, stress<sup>33</sup>, decision-making biases or just a particular financial struggle;
  - **Create advisory bodies** or institutions specialized in small loan advising and digital platform for product comparison;
  - **Paying to get out of debt.** The last but not least is the circumstance that on the market there are specialized companies which theoretically want to help and assist consumers in debt, so-called “Debt management firms”.<sup>34</sup> However, their assistance may be very expensive, with poor quality advice or inappropriate services, thus they are highly susceptible to be detrimental to debtors. As the study report of European Parliament (2014: 66) asserts “consumers can be left in a worse financial position by some debt solution”.

---

the maximum number of renewals to two and provides the creation of an extended payment plan “EPP” in order to facilitate the loan repayment.

<sup>33</sup> Also, that caused by the decision itself.

<sup>34</sup> For more detailed information, Australian Securities and Investments Commission, 2016.



## CONCLUSIONS

Although the harms caused by financial products are less visible than those provided by tangible goods, regulators must be aware of the private suffer which accompany the financial problems (Porter, 2009) and take adequate effective actions in order to safeguard the rights and interests of citizens in need.

It must be kept in mind that there is a common societal responsibility to protect particular communities and to ensure non-discriminatory financial inclusion. Denying this segment of consumers fair and secure access to financial services and essential goods would preclude them full participation in the society and as a result it could lead to greater and more acute divisions of the population. A complete ban on small-dollar credit products can leave stranded many individuals facing long-term indebtedness, especially during and after the ongoing emergency due to the spread of COVID-19.

While the author of this contribution is aware that the rampant problem of predatory practices in lending and mis-selling of financial products and services may not be combated as a whole, governments, specialized authorities and enforcement agencies should try to curb or mitigate it as much as possible through the clear, decisive actions and comprehensible legislation that cause as little harm as possible to those it attempts to safeguard.

## DISCLOSURE STATEMENT

The authors report no conflicts of interest.

## REFERENCES

- American Banker (2020a). *Bank of America takes on payday lenders*. <https://www.americanbanker.com/articles/bank-of-america-takes-on-payday-lenders> [Accessed 20.07.2022].
- American Banker (2020b). *CFPB makes it official rescinds Cordray era limits on payday lenders*, <https://www.americanbanker.com/news/cfpb-makes-it-official-rescinds-cordray-era-limits-on-payday-lenders> [Accessed 20.07.2022].
- Apgar, W.C. Jr. and Herbert, C.E. (2005). *Subprime Lending and Alternative Financial Service Providers: A Literature Review and Empirical Analysis*. Cambridge, MA: U.S. Department of Housing and Urban Development.
- Australian Securities and Investments Commission (2016). *Paying to get out of debt or clear your record: The promise of debt management firms*, Report 465.
- Bar-Gill, O. and Warren, E. (2008). Making Credit Safer. *University of Pennsylvania Law Review*, 1(11).
- Bhutta, N., Goldin, J. and Hamonoff, T. (2016). Consumer Borrowing after Payday Loan Ban, *Journal of Law and Economics*, 59(1). <http://dx.doi.org/10.1086/686033>.



- Bertrand, M. and Morse, A. (2011). Information Disclosure, Cognitive Biases, and Payday Borrowing, *The Journal of Finance*, 66(6). <http://dx.doi.org/10.1111/j.1540-6261.2011.01698.x>.
- Board of Governors of the Federal Reserve System (2020). *Report on the Economic Well-Being of U.S. Households in 2019, Featuring Supplemental Data from April 2020*. <https://www.federalreserve.gov/publications/files/2019-report-economic-well-being-us-households-202005.pdf>.
- CFA, Payday Loan Information For Consumers. *Legal Status of Payday Loans by State*. <https://paydayloaninfo.org/state-information> [Accessed 4.12.2021].
- Civic Consulting of the Consumer Policy Evaluation Consortium (2013). *The over-indebtedness of European households: updated mapping of the situation, nature and causes, effects and initiatives for alleviating its impact – Part 1*. [https://ec.europa.eu/info/sites/info/files/final-report-on-over-indebtedness-of-european-households-synthesis-of-findings\\_december2013\\_en.pdf](https://ec.europa.eu/info/sites/info/files/final-report-on-over-indebtedness-of-european-households-synthesis-of-findings_december2013_en.pdf) [Accessed 03.07.2022].
- Consumer Financial Protection Bureau (2020). *Final Rule. Payday, Vehicle Title, and Certain High-cost Installment Loans*.
- Campbell, J.Y., Jackson, H.W., Madrian, B.C. and Tufano, P. (2011). Consumer Financial Protection. *The Journal of Economic Perspective*, 25(1). <http://dx.doi.org/10.1257/jep.25.1.91>.
- Chen, V. (2020). Online Payday Lenders: Trusted Friends or Debt Traps? *University of New South Wales Law Journal*, 43(2). <http://dx.doi.org/10.53637/XKSR8815>.
- Community Financial Service Association of America (2006). *National Data on Short-term Credit Alternatives*, [http://www.cfsa.net/downloads/National\\_Data\\_on\\_short\\_term\\_Credit\\_Alternatives.pdf](http://www.cfsa.net/downloads/National_Data_on_short_term_Credit_Alternatives.pdf) [Accessed 02.07.2022].
- EFIN Research Working Group on Over-Indebtedness (2018). *Unfair Lending Practices and Toxic Loans*, Finance Watch. <https://www.finance-watch.org/wp-content/uploads/2018/12/EFIN-Unfair-Lending-Practices-and-Toxic-Loans-VF-6Dec.pdf> [Accessed 30.06.2022].
- Engel, C.K. and McCoy, A.P. (2002). A Tale of Three Markets: The Law and Economics of Predatory Lending. *Texas Law Review*, 80(6). <http://dx.doi.org/10.2139/ssrn.286649>.
- European Parliament (2014). *Consumer Protection Aspects of Financial Services. Study*, PE 507.463.
- European Commission (2018). *Distribution systems of retail investment products across the European Union. Final Report*.
- Evans, T. (2013), *Wonga pushes up typical APR to 5,853 per cent - but says that means borrowers pay less for payday loans*. <https://www.thisismoney.co.uk/money/cardsloans/article-2345670/Wonga-pushes-typical-APR-5-853-cent--says-borrowers-pay-payday-loans.html> [Accessed 20.07.2022].
- FDIC, Press Releases, *Federal Agencies Encourage Banks, Savings Associations and Credit Unions to Offer Responsible Small-Dollar Loans to Consumers and Small Businesses Affected by COVID-19*. <https://www.fdic.gov/news/press-releases/2020/pr20039.html>.
- FDIC, Press Releases, *Federal Agencies Share Principles for Offering Responsible Small-Dollar Loans*. <https://www.fdic.gov/news/press-releases/2020/pr20061.html>.
- Federal Trade Commission (2021). *What to know about payday and car title loans*. <https://www.consumer.ftc.gov/articles/0249-online-payday-loans> [Accessed 20.07.2022].
- Federal Deposit Insurance Corporation – FDIC (2020). *The FDIC Survey of Household Use of Banking and Financial Services*.
- Federal Deposit Insurance Corporation – FDIC (2018). *The 2017 National Survey of Unbanked and Underbanked Households*.
- Federal Deposit Insurance Corporation (2007). *Financial Institution letters*. <https://www.fdic.gov/news/financial-institution-letters/2007/fil07050a.html> [Accessed 20.07.2022].
- Financial Health Network (2020a). *Financially Undeserved Market Size Study 2019*.

- Financial Health Network (2020b). *Financial Health Network Statement on the CFPB's Rescission of 2017 Payday Rule*.
- Financial Services User Group – FSUG (2019). *Responsible consumer credit lending. FSUG opinion and recommendations for the review of the Consumer Credit Directive*. [https://ec.europa.eu/info/sites/info/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/fsug-opinions-190408-responsible-consumer-credit-lending\\_en.pdf](https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/fsug-opinions-190408-responsible-consumer-credit-lending_en.pdf) [Accessed 02.07.2022].
- Fitch, C., Hamilton, S., Basset, P. and Davey, R. (2011). The relationship between personal debt and mental health: A systemic review, *Mental Health Review Journal*, 16(4), <http://dx.doi.org/10.1108/13619321111202313>.
- Guedj, I.S. (2019). *Report Reviewing Research on Payday, Vehicle Title, and High-Cost Installment Loans*. <https://lawyerscommittee.org/wp-content/uploads/2019/05/Report-reviewing-research-on-payday-vehicle-title-and-high-cost-installment-loans.pdf> [Accessed 27.06.2022].
- Jérusalmy, O. (2020). What makes credit so risky? A consumer perspective, *Finance Watch*, [https://www.finance-watch.org/wp-content/uploads/2019/06/What-makes-credit-so-risky\\_FW-paper\\_June2019.pdf](https://www.finance-watch.org/wp-content/uploads/2019/06/What-makes-credit-so-risky_FW-paper_June2019.pdf) [Accessed 27.06.2022].
- Mann, J.R. and Hawkins, J. (2007). Just Until Payday. *UCLA Law Review*, 54.
- Markowitz, H. (1952). The utility of wealth. *Journal of Political Economy*, 60(2), <http://dx.doi.org/10.1086/257177>.
- Miller, W.T. Jr. (2019). *How Do Small-Dollar, Nonbank Loans Work?* Arlington, Virginia: The Mercatus Center at George Mason University.
- National Consumer Law Center – NCLC (2019). *What States can do to help consumer. High-Cost Loans*.
- National Consumer Law Center – NCLC (2014). *Guidelines for Affordable Small Dollar Loans*.
- Porter, K. (2009). *The Credit Cure', The Tobin Project*, <https://dcarpenter.scholar.harvard.edu/files/dcarpenter/files/fpsc-tobin.pdf> [Accessed 22.06.2022].
- Prager, A.R. (2009). *Determinants of the Locations of Payday Lenders, Pawnshops, and Check-Cashing Outlets*. Working Paper No. 2009-33. Washington DC: Federal Reserve Board. Division of Research and Statistics and Monetary Affairs,
- Prelec, D. and Loewenstein, G. (1991). Decision Making over Time and under Uncertainty: A Common Approach. *Management Science*, 37(7). <http://dx.doi.org/10.1287/mnsc.37.7.770>.
- Putney, B.A. (2003). Rules, Standards, and Suitability: Finding the Correct Approach to Predatory Lending. *Fordham Law Review*, 71(5).
- Reifner, U., Clerc-Renaud, S. and Knobloch, R.M. (2010). *Study on interest rate restriction in the EU: Final Report for the EU Commission DG Internal Market and Services*. Brussels/Hamburg/Manheim: Institut für Finanzdienstleistungen E.V.
- Responsible Lending (2020) *Case 1:20-CV-03122*, <https://www.responsiblelending.org/sites/default/files/nodes/files/research-publication/complaint-nalcab-v-cfpb-oct2020.pdf> [Accessed 20.07.2022].
- Skiba, M.P. and Tobacman, J. (2019). Do Payday Loans Cause Bankruptcy? *Journal of Law and Economics*, 62(3). <http://dx.doi.org/10.1086/706201>.
- Stegman, M.A. and Faris, R. (2003). Payday Lending: A Business Model that Encourages Chronic Borrowing. *Economic Development Quarterly*, 17(1), <http://dx.doi.org/10.1177/0891242402239196>.
- Sweet, E., Kuzawa, C. and McDade, T. (2018). Short-Term Lending: Payday Loans as Risk Factors for Anxiety, Inflammation and Poor Health. *SSM-Population Health*, 5, <http://dx.doi.org/10.1016/j.ssmph.2018.05.009>.
- The New York Times, <https://www.nytimes.com/2020/08/06/business/economy/unemployment-claims.html>.
- The Pew Charitable Trusts (2020). *How Virginia's 2020 Fairness in Lending Act Reforms Small-Dollar Loans*, <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2020/10/how-virginias-2020-fairness-in-lending-act-reforms-small-dollar-loans> [Accessed 22.06.2022].

- The Pew Charitable Trusts (2019). *Prospects Rising for Lower-Cost Small-Dollar Loans*. <https://www.pewtrusts.org/en/research-and-analysis/articles/2019/10/09/prospects-rising-for-lower-cost-small-dollar-loans> [Accessed 20.11.2022].
- The Pew Charitable Trusts (2018). *Standards needed for safe Small installment loans from banks, credit unions*. <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2018/02/standards-needed-for-safe-small-installment-loans-from-banks-credit-unions> [Accessed 25.06.2022].
- The Pew Charitable Trusts (2012). *Small Dollar Lending*, 2<sup>nd</sup> Annual Consumer Research Symposium. <https://www.fdic.gov/analysis/cfr/consumer/2012/bourke.pdf> [Accessed 20.07.2022].
- Willis, L.E. (2017). The Consumer Financial Protection Bureau and the Quest for Consumer Comprehension. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 3(1).
- Virginia Fairness in Lending Act (2020). Senate Bill 421, House Bill 789, Virginia General Assembly. <https://lis.virginia.gov/cgi-bin/legp604.exe?201+ful+CHAP1258> [Accessed 22.05.2022].

Zakończenie recenzji/ End of review: 27.10.2022

Przyjęto/Accepted: 02.11.2022

Opublikowano/Published: 07.12.2022



## THE BLOCKADE OF BANK ACCOUNT BY THE USE OF STIR – DANGER OR PROTECTION FOR TAXPAYERS IN THE LIGHT OF SAC’S DECISIONS

Radosław Witczak\*



<https://doi.org/10.18778/2391-6478.4.36.06>

### Abstract

**The purpose of the article/hypothesis.** The purpose of the paper is the evaluation of using STIR to blockade the bank account by tax administration. The research hypothesis is as follows: The blockade of the bank account by the use of STIR is abused by tax administration. **Methodology.** The descriptive study including critical attitude to legal acts and literature was used as well as the case studies of SAC’s decisions were applied as scientific methods. **Results of the research.** Tax frauds in VAT are an important problem of security of taxpayers. One instrument to combat them is the blockade of bank account by the use of STIR. Tax authorities very seldom use the blockade of bank account by the use of STIR. The analysis of SAC’s decisions shows that tax authorities do not abuse this instrument. The blockade of bank account by the use of STIR decreases tax frauds and increases the security of taxpayers.

**Keywords:** tax ordinance, STIR, blockade of bank account, combating tax frauds, security of taxpayers.

**JEL Class:** H26, K34, H83.

\* Ph.D. Faculty of Economics and Sociology, University of Lodz, e-mail: [radoslaw.witczak@uni.lodz.pl](mailto:radoslaw.witczak@uni.lodz.pl) <https://orcid.org/https://orcid.org/0000-0002-9746-0016>

## INTRODUCTION

One of the essential elements related to both the security of the public finance system and the economic activity is the tax system. The relationships between the tax system and taxpayer security can be diverse. They may include the occurrence of tax frauds. A very important type of tax frauds is carousel crime. The tolerance of tax frauds by the state may result in unfair competition with regard to entities meeting their tax obligations, which may also result in a reduction in the scale of economic activity. Organizers of carousel crimes also pose a threat to honest taxpayers. They can exploit normally operating taxpayers to defraud VAT. Therefore, the tax system should include instruments preventing tax frauds. One of such instruments is blocking a bank account under STIR (abbreviation for Polish – system teleinformatyczny izby rozliczeniowej – clearing house ICT system). However, its application to an honest entrepreneur may cause a threat to his operation. When the account-blocking mechanism was introduced, tax advisors expressed concerns that the institution could be abused. Its use against taxpayers who accidentally fall into the blockade system can cause the company's finances to be at risk. Even a short lack of access to money may disturb the company's liquidity (Tarka, 2018: A16). Tax experts compared the introduction of the possibility of blocking an account under STIR to equipping tax administration with nuclear weapons (Tarka, 2020; Mroziuk and Zalewski, 2019).

The purpose of the paper is the evaluation of using STIR to blockade the bank account by tax administration. The research hypothesis is as follows: The blockade of the bank account by the use of STIR is abused by tax administration. The descriptive study including critical attitude to legal acts and literature was used as well as the case studies of SAC's decisions were applied as scientific methods.

### **1. BANK ACCOUNT BLOCKING AS AN ELEMENT OF THE USE OF THE STIR SYSTEM – RULES OF APPLICATION**

One of the elements influencing security of the public finance system and economic activity is the occurrence of tax frauds. Crimes related to VAT frauds, including carousel offenses, are of particular importance. Their occurrence reduces tax revenues. At the same time, the state's tolerance of tax frauds may result in unfair competition with regard to entities fulfilling their tax obligations, which may also result in a reduction in the scale of business activity. Organizers of carousel offences are also a threat to honest taxpayers. They can use normally functioning taxpayers to defraud VAT. Therefore, there should be some instruments in the tax system to counter tax frauds. In the past decade numerous

methods like reverse charge, split payment, Standard Audit File were implemented in the tax system to diminish the VAT gap.

One of such instruments was the introduction of a regulation to the tax ordinance enabling the Head of the National Revenue Administration to block funds in the taxpayer's bank account under the STIR. Similar instruments (the blockade of bank account by the tax administration) exist not only in Poland but also in other countries (Markowić, 2014: 258–267). The reverse charge or split payment are instruments whose aim is to prevent the commitment of tax fraud. The blockade of a bank account by the use of STIR aims not only to prevent the commitment of tax fraud but also to blockade the funds of tax evaders.

The term STIR itself refers to the clearing house ICT system. This system is used to analyze cash flows on bank accounts. It is maintained and operated by the National Clearing House – as an interbank clearing house in Poland (Mikuła, 2018: 27–32). At the same time, STIR is used by the legislator as a tool for typing suspicious transactions and entities that should be controlled and their bank accounts blocked. The STIR system is not only used to block bank accounts, but is also used for: risk analysis prior to the initiation of controls, prevention of undue VAT refunds, identification and interruption of the chains of companies trading fictitiously with each other (Sarnowski and Selera, 2020: 40).

Thus, a bank account monitoring mechanism is used to decide on the blocking of a bank account. An account blockade is a specific type of instrument designed to prevent an entity from temporarily disposing of funds in order to prevent tax evasion. According to the government's assumptions, the main purpose of introducing bank account blocking using the STIR is to tighten the tax system and, in particular, to reduce the VAT gap caused by frauds. At the same time, the use of this mechanism is to eliminate companies that cheat honest entrepreneurs and contribute to the improvement of business conditions for all taxpayers by restoring fair competition on the market (Druk nr 1880). The subject literature points out that the scale of scams significantly harms the financial security of the state. Blocking a bank account is to prevent the transfer of funds accumulated by entities suspected of fiscal frauds to another financial institution in a selected place in the world (Babiarz, 2019). The body authorized to block the account is the Head of the National Revenue Administration. The blockade may be applied as a result of a risk analysis. An important element of the analysis is the determination of the so-called risk index. It is determined on the basis of algorithms which, as a rule, are secret. If STIR assigns a specific risk indicator to a given entity, or the indicator changes, such information is provided only to the Head of the National Revenue Administration and the relevant bank at least once a day (Mikuła, 2018: 27–32). A special algorithm is used to target suspicious accounts. According to the regulations, officials take five considerations into account: economic, geographic, subject matter, behavioral

and relationship criteria. They analyze, inter alia, whether the transactions are economically justified and whether there is a high risk of tax frauds in a given industry (Pogroszewska, 2018).

The literature indicates that the algorithm used by Head of the National Revenue Administration belongs to the so-called Automated Decision Making (ADM) systems. ADM systems combine technical infrastructure and social procedures in order to delegate a part of decision-making to computer models, which has so far been in the hands of humans (Mileszyk et al., 2019: 28). On the basis of the cash flow information provided by banks and the National Clearing House, as well as the additional criteria indicated earlier, the STIR automatically assigns an appropriate risk indicator to trading participants (Chądzyński, 2019).

The determination of risk indicator and other information collected by the Head of the National Revenue Administration (e.g., analysis of Standard Audit File for Tax) may lead to an assumption that the activity of a given entity is related to criminal acts – in particular, to tax extortion, and this may result in blocking the bank account (Mikuła, 2018: 27–32; Szulc, 2019a); The entity against which the blockade occurs is referred to as a qualified entity. The blockade is imposed up to 72 hours – based on Article 119zv and can be extended up to three months as stated in the Tax Ordinance Act of August 29, 1997 (Journal of Laws 2021, item 1540).

The regulations indicate two basic criteria to be followed by the Head of the National Revenue Administration when issuing an order on a blockade for a period of up to 72 hours. The first criterion is the occurrence of a high risk of using the activities of banks or credit unions for purposes related to tax frauds. The second criterion is that a blockage is necessary to counteract it. Both conditions should be met jointly (Tarka, 2018: A16). The blockade may be extended if there is a reasonable fear that a qualified entity will not fulfill an existing, or about to arise, tax liability exceeding the equivalent of €10,000 in line with the Tax Ordinance Act of August 29, 1997: Article 119zw (Journal of Laws 2021, item 1540).

Thus, the Clearing House ICT System is used as a channel for transmitting information, data and requests both to the Head of the National Revenue Administration (e.g., information on the risk indicator) and in the reverse direction (e.g., in connection with a request from the Head of the National Revenue Administration to apply a block on a qualified entity's account) (Zalewski, 2021).

The tax administration uses the blockade of the bank account by the following (see Table 1).



Table 1. The blockade of the bank account by the use of STIR by the tax administration

	2018	2019	2020
Number of qualified entities	23	120	196
Number of blocked bank accounts	41	566	1020
Total amount of funds blocked on the bank accounts (PLN mln)	10.3	69.7	96.2

Source: Szymczyk and Szymański (2022: 21).

The data in Table 1 shows that a number of qualified entities, bank accounts and total amount of blocked funds has increased since 2018. As the Ministry of Finance has informed, thanks to the STIR system, in the period from 2017 to the end of June 2022, the Head of the National Revenue Administration blocked bank accounts of 733 entities 3478 times, to the amount of almost PLN 313 million (Pokojska, 2022) So, we can expect that this instrument will be used increasingly often by tax administration.

In the literature, account blocking is not clearly evaluated.

When proposing the introduction of account blocking, the tax administration announced that account blocking was intended to be an extraordinary instrument and would not be abused (Rudowski, 2018: A16).

When the account-blocking mechanism was introduced, tax advisors expressed concern that it could be abused. Its use against taxpayers who accidentally fall into the blockade system can cause the company's finances to be at risk. Even a short lack of access to money may disturb the company's liquidity (Tarka, 2018: A16). Tax experts compared the introduction of the possibility of blocking an account under STIR to equipping tax administration with nuclear weapons (Tarka, 2020; Mroziuk and Zalewski, 2019).

The opinion is expressed that "regulations on blocking bank accounts based on an algorithm unknown to anyone – except the officials involved – violate the constitutional principle of proportionality" (Matarewicz, 2021).

Evaluating the initial actions of tax authorities with regard to the applied account blocking within the STIR, an opinion is expressed according to which entrepreneurs need not fear abuse of powers in this regard (Szulc, 2019b). It is pointed out that the blocking procedures are clear and the risk of abuse by tax administration is low (Chądzyński, 2019).

On the other hand, it is indicated that officials will reach for the blockade of accounts too hastily and willingly, which may hit honest taxpayers. As a confirmation of this opinion, the authors point to numerous disputes that are submitted to administrative courts (Tarka, 2022: D4). Some authors, assessing the activities of tax administration authorities, express the opinion that although there

is an improvement in statistics related to the effectiveness of inspections, tax authorities continue to abuse tools that are burdensome to taxpayers. A good example is the fact that by November 2021, 243 STIR blockades were implemented, in which there were blocked funds in 1,169 bank accounts for the total amount of PLN 83.86 million – which is more than 20% more than in the previous year (Majkowski and Wala, 2022: 6–7).

However, the mere fact of the occurrence of court disputes does not necessarily mean that tax authorities are abusing the blocking of accounts. Taxpayers have a right to lodge a complaint against the actions of tax administration bodies, even if objectively the actions of the authorities were lawful. Likewise, the mere increase in the number or value of the blockades carried out is not a basis for concluding that the instrument is being abused. Therefore, in order to assess whether the blocking of accounts is being abused, it is important to analyze the court rulings themselves, in which there has been a review of the actions of tax administration authorities.

In the opinion of some authors, the analysis of the rulings of the Provincial Administrative Court leads to the conclusion that the account was blocked due to: the tax officials' complete ignorance of the business models operating in the economy, faulty interpretation of the blocking regulations, making accusations in exaggeration, lack of any analysis of the facts supported by evidence, the existence of small discrepancies between the gross value of VAT invoices shown in SAF for VAT and cash flows (Kwietko-Bębnowski, 2021: 22). The evaluation of the activities of tax authorities requires an analysis of the rulings of administrative courts. For the purposes of the undertaken study, an analysis of the judgments of the Supreme Administrative Court was carried out.

## **2. ASSESSMENT OF THE APPLICATION OF THE BLOCKADE BY FISCAL ADMINISTRATION**

The assessment of the blockade by tax administration was carried out through the analysis of a case study – judgments of the Supreme Administrative Court. Taxpayers who do not agree with the decisions of tax authorities regarding the applied blockade of the bank account under the STIR may submit a complaint to the Provincial Administrative Court. Due to the two-instance nature of court proceedings in Poland, the parties (both taxpayers and tax administration authorities) have an option of submitting a cassation appeal to the Supreme Administrative Court. The analysis of the Supreme Administrative Court's rulings on bank account blocking is intended to serve the purpose of the article and to verify the adopted hypothesis. As of March 25, 2022, there were 17 judgments of the Supreme Administrative Court assigned to the provisions on account blocking in the Lex database. All 17 NSA judgments were analyzed. Not all resolved rulings assessed the legitimacy of the blockade provision (see Table 2).

Table 2. The number of judgments in which the court assessed the blocking of the account and the number of judgments related to other issues

Number of judgments covered by the examination	Number of judgments in which account blockade was assessed	Share of the number of judgments in which account blockade was assessed in total judgments	Number of judgments on other issues	Share of judgments on other issues in total judgments
17	10	58,8%	7	41,2%

Source: own calculations.

The data in Table 2 shows that in seven analyzed cases, the court did not rule on the merits of the order imposing the blockade. Although tax administration authorities applied the account blockade, the panel of judges did not assess the legitimacy of its use, but considered various other issues. Among other things, they assessed the power of the courts to review the so-called 72-hour blockade. The rulings also referred to procedural issues concerning the time limit for reviewing a complaint against an order to extend the deadline for blocking bank accounts, the deadline for extending the VAT refund, or the form and effect of serving a letter. On the other hand, ten judgments of the Supreme Administrative Court related to the issue of blocking an account under STIR. In the vast majority of decisions, the Supreme Administrative Court approved the actions of tax administration authorities (see Table 3).

Table 3. Supreme Administrative Court's assessment of account blocking under STIR

Number of judgments covered by the examination	Number of judgments in which an account block was accepted	Share of the number of judgments in which an account block was accepted in the judgments examined	Number of judgments in which no resolution occurred	Share of the number of judgments in which no resolution occurred in the judgments examined
10	9	90,0%	7	10,0%

Source: own study.

The data in Table 3 shows that in none of the analyzed cases the court found that the tax authority unjustifiably blocked the bank account. This allows to conclude that the actions of tax administration bodies are not characterized by abuse of the discussed instrument. Such an observation should be considered a positive element in the functioning of the tax administration.

In one case, there was no ruling on the legitimacy of blocking bank accounts. The court of first instance ruled that in its proceedings it could not consider whether the taxpayer's account was used for purposes related to or aimed at defrauding the taxpayer. The Supreme Administrative Court disagreed with the interpretation made by the Provincial Administrative Court and overturned its ruling, referring the case for reconsideration. However, the Supreme Administrative Court did not make a final ruling on whether the account blocking was applied correctly. Thus, it is not possible at this stage of the case to determine whether the tax authorities' actions were justified.

In nine analyzed cases, the Supreme Administrative Court approved the actions of tax authorities, finding that there were grounds for blocking the taxpayer's account. The Supreme Administrative Court found that the suspicion that the entities might have participated in tax frauds was justified, and that there was a justified fear that the taxpayer would not fulfil an existing, or arising tax liability. In order to assess the correctness of the application of account blocking, it is worth conducting a thorough analysis of the premises for its application. In the analyzed cases, the tax authorities blocked the account for taxpayers who undertake various activities that expose the state treasury to losses. These activities can be divided into the following groups:

- VAT evasion,
- evasion of VAT and excise duties,
- reducing VAT paid by reducing input VAT,
- participation of the taxpayer in the VAT fraud mechanism.

Tax authorities have blocked a bank account in connection with VAT evasion for two taxpayers.

In one case, the tax authority found that the taxpayer deliberately participated in such an artificially created structure of selling goods to individual customers, which only appeared to be intermediation in the distribution of goods. The authority presented a detailed description of the mechanism aimed at non-payment of the tax. The company was in fact making sales (mostly retail) through sales platforms and its own online shop. The use of the account blockade was to protect the interests of the state treasury.

In another analyzed case, the taxpayer made sales on the Polish territory to individuals and business entities, which should have been taxed in Poland at the basic rate of 23%, but were shown as a supply from the UK. This conclusion was reached on the basis of an analysis of:

- financial flows on bank accounts ,
- the organizational structure of the taxpayer, including the place of doing business, persons entitled to bank account,
- structure of trading in new electronics in connection with the Polish entity.

In these both cases, the panels of judges found that in such situations it was reasonable to apply a blocking of the bank account in order to safeguard the interests of the state treasury.

The administrative court also accepted the application of a bank account block in relation to the evasion of VAT and excise duties. The taxpayer's core business was the production of lubricating oil with parameters similar to diesel oil. This provided, *inter alia*, an opportunity to use the lubricating oil as a substitute for diesel and then placing this product on the market without paying the due fees and taxes in connection with the use of the excise duty suspension procedure. The tax administration authorities indicated that, in most cases, the destinations/deliveries of the product were in the commercial documents accompanying the shipment other than the address/country/data of the consignee of the goods to whom the documents were issued. Moreover, the findings showed that the actual delivery of the excise product was made to a different location than that declared in the documents accompanying its shipment. In addition, it was found that payments were received in the controlled period from an entity that had been deleted from the VAT register and did not sell to the company. The value of payments from one of the counterparties amounted to PLN 9.8 million in PLN terms, while the sales disclosed in the SAF for VAT files to this entity amounted to PLN 30.5 million. This was done to make the transactions more plausible. The court agreed that the blockade was justified in such circumstances.

The account blockage under STIR was also used by two taxpayers due to the reduction of the VAT paid by reducing the input VAT. In one of the cases, the taxpayer indicated that he is a so-called large taxpayer (served by a specialized tax office), pays his tax on time, does not liquidate his assets, and operates on the family property of the company's owners. Since the beginning of 2019, he has declared and paid more than PLN 2.8 million in value added tax for the period between January–September 2019. However, according to the court, a detailed analysis of the taxpayer's counterparties indicated that they may have been involved in tax fraud, engaged in extortion, or assisted other entities in doing so by avoiding payment of tax due. According to the court, it could not be ruled out that the counterparties explicitly acted as so-called "disappearing taxpayers" or acted as buffers artificially extending the supply chain, with the disappearing taxpayers being the entities before them in the invoicing chain. The court found that there was a reasonable suspicion that the taxpayer's inclusion in his tax accounts of purchase VAT invoices issued to two entities did not document actual economic events and could only have been intended to reduce output tax by the input tax resulting from those invoices. The court stated that the blocking of an entity's account may be necessary in order to counteract defrauding taxpayers other than the qualified entity. In the following case, it was considered that the taxpayer may have been involved in a practice whereby output tax was reduced

by the input tax resulting from VAT invoices stating transactions that had not actually taken place. In the opinion of the tax authorities, the taxpayer used accounting evidence that could document fictitious acquisitions and the tax returns he submitted are not factually correct. Such conclusions were drawn on the basis of an analysis of the statement of transactions, invoices, tax returns, transfers in the company's bank accounts, as well as an analysis of evidence concerning its counterparties. The panel of judges agreed with the argumentation of the tax authorities, confirming the legitimacy of the bank account blocking applied.

In four analyzed cases, in the opinion of the tax authorities, it was necessary to block a bank account under STIR due to the taxpayer's involvement in a VAT fraud mechanism.

The tax authority blocked bank account of "Y" limited liability company due to the actions of its counterparty. Company "Y" concluded goods purchase transactions from a related company "X", which was registered at the same address as company "Y". Company "X" submitted SAF for VAT from January to August 2019, whereby "X" reported neither supplies nor amounts of purchases of goods and services for January–February 2019. Sales of goods began to be declared from March 2019. However, the purchase of goods began to be shown in SAF for VAT from May 2019. The total value of sales was over PLN 38 million, and the purchase value was over PLN 8 million. Additionally, company "X" did not pay VAT. The Tax Office enforced PLN 550,000 for the receivables of company "X", but the arrears of company "X" still exceeded PLN 6.3 million. All the circumstances, including the activities of company "X" – the disproportionate amount of purchases in relation to the amount of sales, the existence of tax arrears resulted in the blocking of company "Y" 's account, which was approved by the Supreme Administrative Court.

In another case, the tax administration found that the taxpayer, in the period from January 2019 to April 2020, declared in the submitted SAF for VAT the largest acquisitions from entities that did not submit VAT-7 tax returns or who used invoices issued by entities that did not submit VAT-7 tax returns in their settlements. Most of these entities were registered with minimal share capital (PLN 5,000), had virtual offices, had no employees, owned no real estate or movable property, did not declare the acquisition of fixed assets, declared purchases from entities that did not submit VAT returns, in the analyzed period they reported only excess input tax over output tax to be carried forward. Some of the contractors were removed from the register of VAT taxpayers in 2019. According to the tax authorities, the taxpayer did not have any significant assets. In the submitted VAT-7 returns in the analyzed period, he did not show the acquisition of fixed assets, he did not submit financial statements for 2018 and 2019. The taxpayer also did not own vehicles and did not own any real estate.

According to the tax authority, the taxpayer did not employ employees, as no payment of salaries or transfers of contributions to the Social Security Institution were found among the operations carried out through the bank account. In addition, an analysis of the bank accounts showed significant differences between the value of funds transferred/received and the gross value of VAT invoices received/issued. The court accepted the application of a bank account blockade in such circumstances.

In the next case, the authority blocked the bank account after analyzing the financial flows on the taxpayer's bank accounts, the differences between payments made through the bank account in comparison with the SAF for VAT files, credits and debits from entities not shown in the submitted SAF for VAT files. Verification of the taxpayer's counterparties was also carried out in terms of analysis of share capital, place of business, method and execution of payments made and disbursements made, personal relationships in companies, turnover in bank accounts in relation to the declared million PLN payments. The analysis pointed to the fact that the taxpayer's contractors had minimal share capital, the companies were formed as a result of the purchase of "ready-made companies" the place of business was a so-called "virtual office", some were eventually removed from the VAT register. The panel of judges agreed with the argumentation of the tax authorities, confirming the legitimacy of the bank account blocking applied.

A detailed analysis carried out by the tax authorities indicated the possibility of participating in VAT fraud in another case. The company declared in SAF for VAT to issue invoices for a total gross value of PLN 50 559 thousand (including output VAT over PLN 9.4 million). However, it received only 4% of the invoice value from its contractors. The total amount of funds that flowed into the company's account in the analyzed period was more than PLN 3.8 million, but 37% of the funds came from entities to which the taxpayer did not declare to issue invoices, while at the same time these entities did not show transactions with the company in their VAT records. At the same time, the company showed invoices for more than PLN 50.5 million in its purchase records, while no payment was made for the purchases made. Direct or indirect suppliers did not show in their records the tax resulting from the invoices shown by the taxpayer. The company did not show assets or employees employed. Among the vast majority of reported contractors, the individuals who founded these companies were repeated owner. and members of their single-member boards of directors at the time of the audit were persons of Vietnamese origin. The cash withdrawals were made by the company's attorney, not by the person listed in the National Court Register as the president. In view of the analysis presented, the tax authority decided to block the account, which was approved by the court.



The analysis of nine rulings shows that in each case there are individual, characteristic premises indicating the possibility of participation of entities in tax frauds. In each case, there were individual circumstances justifying, in the opinion of the Supreme Administrative Court, blocking the account. The extensive analysis carried out by tax administration bodies should be assessed positively. It was not narrowed down to the risk indicator alone, but other information indicating the legitimacy of applying an account blocking under STIR was taken into account. The conducted research allows to conclude that the research hypothesis has been negatively verified. In none of the analyzed cases, the Supreme Administrative Court found that the tax authority unjustifiably blocked a bank account.

## **CONCLUSIONS**

VAT frauds are a significant problem for public finances. One of the instruments aimed at counteracting unfavorable mechanisms is the introduction of blocking bank accounts under the STIR system. However, for individual entities, the use of a blockade may pose a threat to their functioning. This is especially true for those entities that are not actually involved in tax crime activities. The conducted research allows to conclude that the research hypothesis has been negatively verified. In none of the analyzed cases, the Supreme Administrative Court found that the tax authority unjustifiably blocked a bank account.

The analysis of these judgments shows that in each case there are individual, characteristic premises indicating the possibility of participation of entities in tax frauds. In each case, there were individual circumstances justifying, in the opinion of the Supreme Administrative Court, blocking the account.

Tax authorities took into account multiple factors when deciding whether to apply a bank account blockade. These were not hasty decisions based solely on a cursory random analysis of data on the only element of the company's operation. The conducted research shows that the blocking of bank accounts under the STIR system is not abused by tax administration authorities. The presence of such an instrument contributes to the reduction of the scale of tax frauds, and increases the security of the public finance system as well as of economic activity by eliminating entities engaged in tax frauds. Nevertheless, it is advisable to conduct further research to evaluate the activities of tax administration. The correctness of the application of regulations does not exclude the possibility of mistakes in the future.



## ACKNOWLEDGMENTS

I would like to thank my wife, Magda for the help in formatting and editing the article when I couldn't work on the computer due to my eyesight.

## DISCLOSURE STATEMENT

The authors report no conflicts of interest.

## REFERENCES

- Babiarz, S. et al. (2019). *Ordynacja podatkowa. Komentarz, wyd. XI*. Lex, el. edition.
- Chądzyński, M. (2019). STIR się rozpędza. *Gazeta Prawna*, dated 11 March 2019, el. edition.
- Druk nr 1880 Rządowy projekt ustawy o zmianie ustaw w celu przeciwdziałania wykorzystywaniu sektora finansowego do wyłudzeń skarbowych. <https://www.sejm.gov.pl/sejm8.nsf/druk.xsp?nr=1880> [Accessed 15.03.2022].
- Kwietko-Bębnowski, M. (2021). Blokada rachunku podmiotu kwalifikowanego – skalpel chirurga czy prymitywna maczuga? *Przegląd Podatkowy*, 6.
- Majkowski, W. and Wala, O. (2022). Sprawozdanie z XII Kongresu Podatków i Rachunkowości KPMG. Najnowsze trendy w kontrolach podatkowych (19 I 2022). *Przegląd Podatkowy*, 3.
- Marković, V. (2014). Closing entrepreneurs by operation of law due to business account blockade. *Pravo i privreda*, 52.
- Matarewicz, J. (2021). 5. STiR a zasada proporcjonalności. In: I. Ożóg, ed., *Karuzele i inne oszustwa podatkowe. Metody przeciwdziałania unikaniu opodatkowania*. Warszawa: Wolters Kluwer Polska. <https://sip.lex.pl/#/monograph/369477206/398226?tocHit=1> [Accessed 26.05.2022].
- Mikuła, P. (2018). System Teleinformatyczny Izby Rozliczeniowej – najważniejsze aspekty nowej regulacji. *Przegląd Podatkowy*, 2.
- Mileszyk, N., Paszcza, B. and Tarkowski, A. (2019). *Zautomatyzowane podejmowanie decyzji w służbie społeczeństwu*. Kraków, Warszawa: Fundacja Centrum Cyfrowe Klub Jagielloński.
- Mroziuk, M. and Zalewski, Ł. (2019). STIR: Rośnie liczba blokad rachunków. Podatnicy bez szans na realną obronę. *Gazeta Prawna*, dated 25 October 2019, el. edition.
- Pokojska, A. (2022). KAS chwali się skutecznością. *Gazeta Prawna*, 29 September 2022, el. edition.
- Pogroszewska, M. (2018). Fiskus blokuje konta z rozwagą. *Rzeczpospolita*, dated 5 November 2018, el. edition.
- Rudowski, J. (2018). Sądy liczą na rozsądek, wywiad przeprowadzony przez A. Tarka. *Rzeczpospolita*, dated 7 May 2018.
- Sarnowski, J. and Selera, P. (2020). Narzędzia informatyczne wykorzystywane w administracji skarbowej i ich wpływ na szczelność systemu podatkowego w Polsce w latach 2015–2019. *Studia BAS*, 4. <https://doi.org/10.31268/StudiaBAS.2020.29>.
- Szulec, M. (2019a). Coraz więcej blokad rachunków bankowych dzięki STIR. *Gazeta Prawna*, dated 3 July 2019, el. edition.
- Szulec, M. (2019b). STIR się rozpędza. *Gazeta Prawna*, dated 25 October 2019, el. edition.
- Szymanek, P. (2021). Sposoby bieżącego nadzoru nad podatnikami w podatkach dochodowych oraz podatku od towarów i usług (lata 1992–2021). *Doradztwo Podatkowe – Biuletyn Instytutu Studiów Podatkowych*, nr 12. <https://doi.org/10.5604/01.3001.0015.6360>.

- Szymczyk, P. and Szymański, W. (2022). Analiza i ocena regulacji uszczelniających w zakresie podatku od towarów i usług wdrożonych na przestrzeni ostatnich lat. *Doradztwo Podatkowe – Biuletyn Instytutu Studiów Podatkowych*, 3. <https://doi.org/10.5604/01.3001.0015.8111>.
- Tarka, A. (2018). Pochopna blokada wykończy firmy. *Rzeczpospolita*, dated 5 May 2018.
- Tarka, A. (2020). Skarbowka wygrała sprawę o przedłużenie blokady konta. *Rzeczpospolita*, dated 28 February 2020, el. edition.
- Tarka, A. (2022). Fiskus może blokować konta, ale z rozważą. *Rzeczpospolita*, dated 14 March 2022.
- Ustawa z dnia 29 sierpnia 1997 r. Ordynacja podatkowa, Dz.U. 2021, poz. 1540, ze zm.
- Zalewski, D., ed. (2021). 3.5. Podstawowe pojęcia związane z wymierzaniem kary pieniężnej izbie rozliczeniowej. In: *Kary pieniężne nakładane przez KAS i ich zaskarżanie*. Warszawa: Wolters Kluwer Polska. <https://sip.lex.pl/#/monograph/369483239/38?tocHit=1> [Accessed 26.05.2022].

Zakończenie recenzji/ End of review: 30.10.2022

Przyjęto/Accepted: 03.11.2022

Opublikowano/Published: 23.11.2022

## THE IMPACT OF ASSET STRUCTURE ON A COMPANY'S FINANCIAL RESULTS STABILITY

Artur Zimny\*



<https://doi.org/10.18778/2391-6478.4.36.07>

### Abstract

**The purpose of the article** is to examine the impact of asset structure on the stability of financial results of companies. The article verifies two hypotheses: 1. high share of non-current assets in total assets results in high volatility of profitability over time. 2. high share of PPE (Property, Plant & Equipment) in total assets results in high volatility of profitability over time.

**The methodology** of the study includes a literature review and empirical research based on correlation analysis. The research covered the aggregated data of Polish non-financial enterprises employing 10 persons or more keeping accounting ledgers, data for years 2009–2020 (first dataset) and annual financial data of 115 companies from 13 WSE industry sub-sectors for years 2009–2021 (second dataset).

**The results of the research.** The analysis of the asset structure and the volatility of profitability in the research sample indicated industries with large and small values of these parameters. Then, the hypotheses were tested; the results for the second dataset showed that there is a positive and weak, but statistically significant ( $p$  value  $\leq 0.005$ ) correlation between non-current asset structure ratio and both, ROS and ROS adjusted ratios, and there is a weak, but negative correlation between PPE structure ratio and ROS and ROS adjusted ratios (with  $p$  value of 0.021 and 0.076, respectively). On this basis, hypothesis 1 was considered as verified positively, and hypothesis 2 was rejected. The discussion contains suppositions concerning the probable reasons of the discrepancy between the result for the hypotheses 1 and 2.

**Keywords:** asset structure, asset tangibility, financial results stability, volatility of profitability, operating leverage.

**JEL Class:** D25, G31.

\* Ph.D. Faculty of Economics and Sociology, University of Lodz, e-mail: [artur.zimny@uni.lodz.pl](mailto:artur.zimny@uni.lodz.pl) <https://orcid.org/0000-0002-6658-952X>

## INTRODUCTION

The stability of financial results is one of the main characteristics of the enterprise. It is important for managers because of the relationship with the operational risk of ongoing operations (e.g. from the point of view of maintaining an appropriate level of liquidity). For the owners of the enterprise, the stability of its financial results determines the possibilities of its development and growth. For potential investors considering investing in a company, this is one of the investment risk measures. Therefore, the academic research should examine the factors influencing the stability of financial results. The subject of research in this study is the potential relationship between the structure of company's assets and the stability of its financial results.

### 1. LITERATURE REVIEW

The primary inspiration to study the impact of the asset structure on the stability of financial results of companies was the observation of the impact of the Covid-19 pandemic on the financial results of Polish enterprises. New data and publications that appeared over time indicated that the pandemic situation affects various industries with varying intensity. Stojczew (2021) notes that tourism is one of the first industries that suffered from the pandemic, which was similar to the crisis in 2009. Zając et al. (2021) points out that microentrepreneurs and farmers, due to the scale of their activities, are particularly vulnerable to the negative consequences of the pandemic. According to the ongoing analyzes of the financial data of Polish enterprises (Zimny, 2020a), the transport sector suffered the most in Q2 2020, while the trade and manufacturing were less impacted, and the construction and energy sectors showed just a slight decrease in sales and even improved profitability. The study of impact of the pandemic on various business branches in the Wielkopolskie voivodeship (*Wpływ pandemii...*, 2021) showed the deterioration of the situation of many of them (passenger transport, accommodation, food services, tourism, education, culture and entertainment, sports and recreation, beauty industry) and improvement of the situation in postal and courier activities. Focusing only on service companies, Dominiak (2022) also points out the difference between industries that have suffered more (hotels and catering), and those that have proven resilient (business-related services) or even benefited from the pandemic (ICT sector). The fact that the pandemic turned out to be favorable for some industries (like internet sales or pharmaceutical companies) is also mentioned by Zimny (2020b; 2022). Jabłońska et al. (2021), examining public aid applied to the national economy during the pandemic, noted specific support for activities that were significantly affected by its effects,

i.e. companies from the tourism and hotel sectors, as well as the organization and service of fairs, conferences and exhibitions.

The differentiation of the impact of the pandemic on the activities of various industries is also reported in other countries. Rapaccini et al. (2020) showed, using the example of Italian companies, that service providers suffered less from the pandemic than manufacturing companies, which was similar to the 2009 crisis. Bloom et al. (2021) studied small businesses operating in the US and found that the biggest drops in sales were recorded by companies from the Travel, Art & Photography and Clothes industries, smaller sales decreases was reported by Retail, Food, Education and Digital industries, and the smallest decline characterized the Medicine industry. They also reported that companies operating only offline saw the biggest drops in sales, while the companies operating only online – the smallest ones. Also Kalogiannidis (2020) indicates the travel & tourism industry as suffering most from the pandemic, while others (e.g. sanitizers and other protective equipment suppliers) recorded an increase in profits. Research by Sama-Berrocal and Corchuelo Martínez-Azúa (2022) shows that even within a narrowly defined sector (in this case: the agri-food sector in Extremadura, Spain), the impact of the pandemic on its subsectors was varied. A good example of significant impact of the pandemic on tourism is also the research of such impact on the touristic activity in the Lviv city in Ukraine (Rutynskyi and Kushniruk, 2020).

It is obvious that the pandemic influenced the financial results of enterprises mainly through restrictions reducing the demand for goods and services. However, while the decrease in demand affects the amount of sales revenues, the changes in the financial result also depend on the changes of costs incurred. One can find observations (*Realne jest...*, 2020) indicating the share of fixed costs as an important factor in generating losses for companies whose revenues drop sharply. Thus, the pandemic verified in practice the negative aspect of operating leverage, i.e. the sensitivity of profit to sales decline. The sensitivity of earnings to changes in sales is one of the company's risk measures, therefore, it is worth empirical verification, but such research should cover a wider (multi-year) time frame, not limited only to a specific period of the pandemic. However, such a study would be very difficult, if not impossible, as companies are not obligated to present fixed and variable cost breakdowns as part of their reporting duties, and many companies do not make such breakdowns even for their own purposes. However, it can be presumed that a higher share of fixed costs is characteristic for companies with a high share of fixed assets in total assets. Companies with large fixed assets incur significant costs of depreciation or lease, servicing, inspections and labor costs related to their exploitation, and a significant part of these costs is not dependent on the production volume, i.e. they are fixed costs. The opposite example are trading companies with a high share of current assets in the form of

inventories of goods; the value of goods sold is, in turn, the main cost of these companies, and it is a variable cost. Therefore, it can be presumed that the structure of assets indirectly (through the structure of costs) influences the volatility of financial results over time. This assumption is the basis of the hypothesis studied in this paper.

When compared to other corporate finance categories, like capital structure or company's valuation, the asset structure seems to be a less popular subject of academic research. There are few papers investigating less obvious factors than the type of activity, which may influence the asset structure of the company (see Kalusova and Badura, 2022; Humeniuk et al., 2022). More studies concern the asset structure as an explanatory variable, especially as one of the factors potentially influencing the structure of the company's financing sources. Such Devesa and Parte Esteban (2011) analysed the factors influencing the indebtedness of the companies and found the impact of fixed assets as negative, although they expected a positive one. Balios et al. (2016) also found that the relation between asset structure and leverage of the company is negative. Similarly, the asset structure was found as the factor negatively affecting the capital structure in the paper of Dewi and Fachrurrozie (2021). The opposite results were reported by Kenourgios et al. (2020), who found tangible assets structure ratio negatively impacting the level of leverage. The research by Delikanlı and Kılıç (2021) was concluded that there is no significant relationship between the asset structure (as one of the factors) and financial debt of the examined companies.

There are also some studies concerning the impact of asset structure on the firm's value; Nyamasege (2014) found that firms with a higher fixed asset base have a higher value than those with lower fixed asset values, while Setiadharna and Machali (2017) showed that there is a direct, but negative effect of asset structure on the firm value. In turn, Ooi and Liow (2020) found that among the various factors that may affect the rates of return on shares of the companies, the asset structure has no statistically significant impact. Other studies concern the relation between the asset structure and the performance of the company, which is closest to the scope of this study. Okwo et al. (2012) examined the relationship between the level of investment in fixed assets and its impact on the firms' operating profit. The relationship occurred to be positive, but the result was not statistically significant. In turn, Olonite (2021) found that fixed assets have a positive and significant impact on return on asset (ROA) and current assets have positive and significant impact on earnings per share (EPS). Some of the conclusions from the research of Saleh et al. (2015) indicated that asset structure significantly influences company's growth, company's profitability and company's value.

The literature review presented above suggests that the asset structure (usually understood as the value of fixed assets or their share in total assets) is an important factor influencing other financial categories, such as the structure of financing sources, firm's value, rates of return on company shares or their financial results. However, the research on the relationship between the asset structure and the stability of financial results over time was not found, therefore, this paper constitutes a significant contribution to the theory of corporate finance.

## 2. HYPOTHESIS AND RESEARCH METHODOLOGY

The theoretical premises of this research stem from the operating leverage model and the supposition that company's asset structure impacts its cost structure. The assumed chain of impact is as follows:

- high share of fixed assets in the total assets structure results in a high share of fixed costs in the cost structure;
- high share of fixed costs means a high degree of operating leverage, i.e. high sensitivity of the profit to changes in sales;
- high sensitivity of profit to changes in sales causes high volatility of profitability over time.

Due to the lack of access to data on the cost structure, the indirect relation was examined, i.e. the impact of the assets structure on the volatility of financial results over time.

Assets structure is defined primarily as their division into long-term and short-term assets. Assets intended to be exploited in the long term are usually referred to by one of the terms: fixed assets, non-current assets, tangible assets or PPE (Property, Plants & Equipment). These terms, although quite synonymous and sometimes used interchangeably, have in fact different (broader or narrower) meanings. To avoid misunderstandings, this study is based on the asset structure defined as total assets divided into:

- current assets, and
- non-current assets, which are divided into:
  - PPE (Property, Plants & Equipment) and
  - other non-current assets.

PPE are the most typical, tangible non-current assets, like buildings, land, machines, devices or means of transport, used for the core activity of the company. In turns, non-current assets other than PPE consist of other long-term components important for the company's operations, which include especially: intangible assets (e.g. patents, licenses, trademarks), long-term tangible investments (e.g. buildings intended for rent or for resale), financial non-current assets (e.g. other companies' shares acquired for strategic purposes) or long-term accruals (e.g. due to long-term construction contracts).

Given the above, it was decided for this paper not to use the term ‘fixed assets’ (to avoid ambiguity whether it replaces the concept of ‘non-current assets’ or ‘PPE’).

It was considered whether to use the term ‘asset tangibility’ instead of ‘asset structure’, because such nomenclature can be found in the literature. It should be noted, however, that the term ‘tangibility’ clearly indicates the assets of material form, so it should not be used interchangeably with the category of ‘non-current assets’, which is a broader term, because it also includes long-term assets other than tangible ones (such as the above-mentioned intangible assets or financial assets). On the other hand, the term PPE does not include tangible assets purchased for investing purposes (e.g. buildings intended for rent or for resale), so its meaning is narrower than covered by the term ‘asset tangibility’. Therefore, it was decided not to use the term ‘asset tangibility’ in the study.

Finally, it was decided to use the broadest and the narrowest concept of long-term assets, i.e.: non-current assets and PPE (Property, Plants & Equipment), in the study. Therefore, there are two hypotheses to be verified:

**H.1: High share of non-current assets in total assets results in high volatility of profitability over time.**

**H.2: High share of PPE (Property, Plant & Equipment) in total assets results in high volatility of profitability over time.**

A positive verification of these hypotheses would mean that enterprises with a large share of non-current assets (or PPE) are exposed to greater changes in financial results in response to changes of sales over time, while a smaller share of non-current assets (or PPE) should result in greater stability of profitability. Proving the existence of such a relation would be of practical value, first of all, for company managers: a high share of non-current assets (or PPE) would indicate that the value of current assets may be too low to secure the liquidity, which in such cases is at greater risk because of the high profit sensitivity to changes in sales. The proof of such a relation would also be useful for stock market investors: a high share of non-current assets (or PPE) would mean a higher investment risk resulting from the high sensitivity of the profit to changes in sales.

The empirical verification of the hypothesis was performed by examining the correlation in several variants, using two datasets, as described below.

The dependent (response) variable is the volatility of financial results. The return on sales (ROS) ratio in its classic version, i.e. net profit related to sales, was used as the main proxy of the financial result measurement. However, in the operating leverage model, in principle, only the basic operating costs (such as depreciation, usage of materials and energy, external services, salaries or taxes



and charges) are taken as variable and fixed costs, while the final net profit consists also of: other operating revenues (e.g. profits from the sale of fixed assets), other operating costs (e.g. losses on the sale of fixed assets, revaluation write-offs of assets), financial revenues, financial costs and income tax. Other operating revenues and financial revenues increase the financial result, although they do not come from the company's core activities. Moreover, basic operating costs are recurring and more stable in time than other operating costs or some financial costs (e.g. exchange differences). Therefore, a significant part of the net profit volatility may result from events not included in the operating leverage model. For this reason, apart from the profitability expressed by the classic ROS ratio, the alternative ratio was employed. For the purposes of this study the ratio was called 'ROS adjusted' and it is defined as basic operating profit (sales less basic operating costs only) in relation to sales. There are two other popular profitability ratios: ROA and ROE, which were also (supplementary) included in the study, so the research included four proxies of the financial result measurement.

The research concerns not the profitability itself, but the volatility of profitability; it was measured by the standard deviation of the values of profitability ratios in the analyzed period.

The independent (explanatory) variable is the asset structure, represented in this study by two proxies:

- non-current assets, including PPE and other non-current assets;
- PPE (Property, Plants & Equipment) only.

The structure of the data provided by Statistics Poland (GUS), as well as by the Biznesradar website, takes into account the above-mentioned division of assets (non-current assets are represented by 'aktywa trwałe' category, and PPE – by 'rzeczowe składniki majątku trwałego'), making the research possible.

Both ratios, i.e. the share of non-current assets in total assets and the share of PPE in total assets, are not constant over time, therefore, additionally, standard deviations of these ratios in the examined period were calculated. These deviations demonstrate the stability of the asset structure of individual companies or sectors; it is clear that the potential relationship between the asset structure and the stability of financial results is more reliable when the structure of assets is stable over time.

Taking into account the above, the hypotheses were verified by examining the correlation for the following pairs of indicators:

1. the standard deviation of the ROS ratio and the average share (average structure ratio) of non-current assets in total assets;
2. the standard deviation of the ROS adjusted ratio and the average share (average structure ratio) of non-current assets in total assets;
3. the standard deviation of the ROS ratio and the average share (average structure ratio) of PPE in total assets;

4. the standard deviation of the ROS adjusted ratio and the average share (average structure ratio) of PPE in total assets.

Additionally, the same correlation analysis was conducted (only for the second dataset) for the ROA and ROE ratios, as an alternative to ROS and ROS adjusted measures of profitability.

The verification was performed on two datasets. First of them is the aggregated financial data of Polish non-financial enterprises employing 10 persons or more, and keeping accounting ledgers. This data is published by the Statistics Poland (Główny Urząd Statystyczny). The data is grouped in NACE sections, which are:

- mining and quarrying
- manufacturing
- electricity, gas, steam and air conditioning supply
- water supply; sewerage, waste management and remediation activities
- construction
- trade; repair of motor vehicles
- transportation and storage
- accommodation and catering
- information and communication
- real estate activities
- professional, scientific and technical activities
- administrative and support service activities
- education
- human health and social work activities
- arts, entertainment and recreation
- other service activities.

This dataset covers a significant number of enterprises, but it enables the comparison of the examined characteristics only between individual sections grouping these companies.

The dataset consists of the annual aggregated financial data for the period 2009–2020 (12 years), so it covers the periods of recession (after the crisis of 2008–2009 and caused by the 2020 pandemic), as well as the period of good economic conditions between these crises.

The second dataset includes data of individual companies listed on the Warsaw Stock Exchange (WSE). There are 14 sub-sector stock exchange indices published by the WSE, grouping different numbers of companies (most numerous is WIG-construction, consisting of 38 companies, and the least numerous are WIG-oil&gas, WIG-chemical and WIG-mining, grouping 5 companies each). The financial data of the companies was obtained from the Biznesradar website, which presents such data in a very uniform way, ensuring their high comparability. The dataset was reduced by excluding:

- all companies from WIG-banking index (the scope of the research should cover only non-financial entities);
- companies for which data for sufficiently long periods (2009–2021) were not available;
- companies with the most unstable structure of assets in the analyzed period (standard deviation of the average share of non-current asset or the average share of PPE greater than 17%);
- companies with an extremely high volatility of profitability in the analyzed period (standard deviation of ROS or ROS adjusted above 1000 percentage points).

After the reduction, the dataset includes 115 companies, with each WSE sub-sector index (except from WIG-banking) represented by at least 1 company.

The characteristics of the second dataset are presented in Table 1.

Table 1. Companies of the second dataset

WSE sub-sector (WSE index)	Total number of companies composing the index	Number of companies covered by the study	Companies covered by the study (WSE tickers)
Construction	38	31	ATR, BDX, CNT, CPR, DCR, ELT, ERB, FRO, HRS, INK, LBT, LTX, MCR, MRB, MSP, MSW, MSZ, NVA, PJP, PRM, PXM, RFK, RMK, RPC, SEL, SKA, TRK, TSG, ULM, UNI, ZUE
Chemical	5	3	ATT, CIE, PCE
Energy	11	8	BDZ, CEZ, ENA, KGN, PEP, PGE, TPE, ZEP
Mining	5	3	JSW, KGH, LWB
Games	18	1	CIG
IT	25	17	ABS, ACP, ALL, ASE, ATD, BCM, CMP, CMR, ELZ, IFI, K2H, LSI, NTT, OPM, TLX, U2K, WAS
Pharmaceuticals	8	2	PHR, SPH
Media	12	7	AGO, ATG, IMS, KCI, KPL, MZA, PGM
Automobiles & parts	7	5	ACG, BAH, CAR, DBC, SNK
Real estate	25	9	AAT, DOM, DVL, EDI, GTC, INP, PHN, RNK, WIK
Clothes	15	11	CCC, HRP, IPO, LBW, LPP, MIR, MON, PRT, SNW, VRG, WOJ
Oil&gas	5	3	MOL, PGN, PKN
Food	20	15	AMB, AST, ATP, GOB, HEL, IMC, KSG, MAK, MBW, OTM, OVO, PMP, PPS, SEK, WWL
<b>Total</b>	<b>194</b>	<b>115</b>	–

Source: own work based on www1 and www2.

The second dataset covers the companies' annual financial data for 2009–2021 period (13 years), so like the first set, both good and bad economic times are covered.

The Games sub-sector has the lowest representation in the study (only 1 company out of 18), because most of these companies were introduced to the stock exchange relatively recently, and there has been no data since 2009 available for them. Some of them were also excluded because of the very unstable structure of assets or the extremely high volatility of profitability in the analyzed period. Similarly, there is a relatively low representation of pharmaceutical and real estate companies. However, the study covers almost 60% of all companies grouped in 13 WSE sub-sectors, and the number of companies covered (115) is sufficient for statistical inference.

### 3. RESULTS

Before the correlation analysis, the data was preliminarily analyzed in terms of the asset structure and the volatility of profitability. Such an analysis for the first dataset is presented in Table 2.

Aggregated data allows to identify sections with extreme shares of non-current assets in total assets. The largest shares are in sections: Accommodation and catering, Water, sewerage & waste, Real estate, Electricity, gas, steam & air and Mining and quarrying, while the smallest ones are in sections Construction, Trade & repair, Manufacturing and Education. The ranking by the share of PPE in total assets is quite similar. The variability in time of both structure ratios for all sections is small (compared to the data of individual companies from the second dataset), which is caused by averaging as a result of aggregating data of a significant number of enterprises within each section.

It is also worth mentioning that PPE constitute the largest part of the non-current assets in the following sections: Water, sewerage & waste, Transportation and storage, Arts, entertainment & recreation and Accommodation and catering, while the smallest – in sections: Professional, scientific and technical activities, Information and communication, Administrative and support service activities and Construction.

As for the stability of financial results, Mining and quarrying shows a distinguishingly high volatility of profitability (the highest standard deviation of the ROS and ROS adjusted ratios). A relatively high volatility of at least one of these ratios characterizes also the following sections: Professional, scientific and technical activities; Accommodation and catering; Electricity, gas, steam & air; Education. Sections showing the most stable aggregated profitability are Manufacturing Trade & repair. It should be noted, however, that aggregating data for entire sections causes compensation of losses of some companies with high profits of others, thus reducing the volatility of profitability for the entire section.

Table 2. Characteristics of the asset structure and the profitability of companies from the first dataset; all data as percentage points

NACE section	Average non-current asset structure ratio	Average PPE structure ratio	Standard deviation of ROS	Standard deviation of ROS adjusted
Mining and quarrying	76	50	11	7
Manufacturing	53	39	0	0
Electricity, gas, steam & air	81	51	4	2
Water, sewerage & waste	84	80	1	1
Construction	37	18	2	1
Trade & repair	38	24	0	0
Transportation and storage	73	64	1	1
Accommodation and catering	84	64	4	4
Information and communication	73	26	2	1
Real estate	82	60	2	0
Professional, scient. and techn.	67	14	6	1
Administr. and support service	60	26	1	1
Education	54	32	3	6
Human health and social work	74	53	1	1
Arts, entertain. & recreation	70	58	1	1
Other service	62	41	2	2

Source: own work based on wwv3.

The calculations of the correlation coefficients verifying the hypotheses for the first dataset are shown in Table 3.

Table 3. Correlation coefficients (and their statistical significance) for the first dataset (17 sections grouping aggregated data of Polish non-financial enterprises)

Asset structure:	Average non-current asset structure ratio	Average PPE structure ratio
Volatility of profitability:		
Standard deviation of ROS	$r = 0.303$ (p value = 0.237)	$r = -0.028$ (p value = 0.915)
Standard deviation of ROS adjusted	$r = 0.128$ (p value = 0.624)	$r = 0.066$ (p value = 0.801)

Source: own work based on Table 2.

The results presented in the Table 3 show that in three variants the correlation coefficient is very low, and p values (greater than 0.6) indicate no statistical significance. In one case (ROS and non-current assets), the value of the coefficient indicates a weak correlation, but it could be considered statistically significant only at a relatively high p value (greater than 0.237), so at the standard level of significance ( $\alpha = 0.05$ ) this coefficient is also statistically not significant. Therefore, the study on the first dataset gives no grounds to consider the hypotheses as verified positively.

It should be emphasized that the research usefulness of the first dataset is limited for two reasons: firstly, it covers the whole sections, so the sample size for the statistical analysis is relatively small (17 sections); secondly, aggregating data in sections causes their averaging, and as a result the asset structures and even more the volatility of profitability for the entire sections are much less varied than for individual enterprises belonging to these sections, which significantly reduces the possibility of statistical identification of the relationship between them. Therefore, the lack of correlation of the studied variables at the level of entire sections does not mean that there is no correlation at the level of individual companies. Thus, this part of the research is only preliminary for the whole study. Nevertheless, it is relevant, because it shows how individual industries differ in terms of the asset structure and profitability volatility, and what signs of correlation coefficients should be expected from the study conducted on the second dataset.

The same research calculations were performed for the second dataset, i.e. the data of 115 individual companies. The calculations regarding assets structure ratios and the profitability ratios of companies from this dataset are presented in Table 4.

The WSE sub-sectors list is partially consistent with the list of NACE sections used as the first dataset, but there are also some differences. Two large NACE sections: Manufacturing and Trade & repair, are represented on WSE by a several more specific subsectors: Automobiles&parts, Oil&gas, Chemical, Pharmaceuticals, Clothes and Food. On the other hand, there are several NACE sections, which do not have equivalents among WSE sub-sectors indices (e.g. Transportation and storage, Accommodation and catering or Education). Therefore, the research conducted on two differently defined datasets complement each other.

The calculation results for the second dataset showed that the average share of non-current assets in total assets is slightly above 50%, but it may be skewed by a more numerous representation of some industries with a relatively low ratio values (like Construction or IT).

Table 4. Asset structures of the companies from the second dataset  
(structure ratios in percentage point, averages for years 2009–2021)

WSE sub-sector (WSE index)	No. of comp.	Average non-current assets structure ratio			Average PPE structure ratio		
		lowest	median	highest	lowest	median	highest
Construction	31	13	42	83	4	18	75
Chemical	3	66	68	71	55	58	58
Energy	8	67	74	84	50	68	77
Mining	3	73	75	82	48	65	78
Games	1	61			2		
IT	17	13	46	73	5	12	56
Pharmaceuticals	2	27	38	48	2	18	35
Media	7	45	57	73	3	10	47
Automobiles&parts	5	24	45	51	14	39	50
Real estate	9	1	47	88	0	1	17
Clothes	11	33	50	73	4	33	53
Oil&gas	3	56	69	75	52	55	68
Food	15	28	53	70	13	44	59
<b>Total</b>	<b>115</b>	1	51	88	0	26	78

Source: own work based on www1.

As shown in Table 4, sub-sectors with a high share of non-current assets include: Mining, Energy, Oil&gas and Chemical, and companies from these industries showed the least diversified values of this structure ratio within their sub-sectors. On the other hand, a particularly low share of non-current assets characterizes the Automobiles&parts and Pharmaceuticals sub-sectors, and the structure ratios of individual companies within these sub-sectors also do not differ significantly. Real estate turned out to be a specific sub-sector, grouping companies with a very diversified non-current assets structure ratio – DOM and EDI companies showed only, respectively, 1% and 3% share of non-current assets, while AAT, GTC and PHN companies have this ratio at 86%-88% level. A similarly high spread of this ratio value was also obtained for the Construction and IT sub-sectors. It means that there are no grounds for generalizing conclusion about the high or low share of non-current assets for these specific sub-sectors, but at the same time, it is a valuable material for the study of correlation, based on individual companies.

As for the share of PPE in total assets, the average ratio was slightly above 25%, which also can be skewed by a more numerous representation of some

industries with a relatively low ratio values (like Construction or IT). Sub-sectors characterized by a high ratio and its low differentiation are the same as in the case of non-current assets ratio, i.e. Mining, Energy, Oil&gas and Chemical, but the ranking is different in the case of the smallest ratio values, because the smallest shares of PPE were obtained for Real Estate sub-sector, followed by Media, IT and Pharmaceuticals. The industry with a particularly high differentiation of this ratio value is Construction.

It is worth mentioning that PPE constitute the majority of non-current assets, but it is not the vast majority – it is (on average) about 60% of non-current assets. The examined companies from the Energy, Chemical, Mining and Oil&gas sub-sectors showed a very high proportion of PPE to non-current assets, but many companies reported PPE as the minority of their non-current assets, especially from sub-sectors: IT, Games and Media (probably because of the high share of intangible non-current assets) and Real estate (probably because of the high share of buildings reported as tangible investments, separately from PPE). It proves that identifying non-current assets with PPE (even as a proxy) is not appropriate and it also justifies a need for separating these two financial categories when formulating the hypotheses for verification.

Table 5. Volatility of profitability of the companies from the second dataset (standard deviations of profitability ratios for years 2009–2021, data as percentage points)

WSE sub-sector (WSE index)	No. of comp.	Standard deviations of ROS ratios			Standard deviations of ROS adjusted ratios		
		lowest	median	highest	lowest	median	highest
Construction	31	1	4	22	1	4	11
Chemical	3	5	7	9	3	5	8
Energy	8	4	8	29	3	10	24
Mining	3	11	19	20	11	14	17
Games	1	41			28		
IT	17	1	4	112	1	4	13
Pharmaceuticals	2	2	15	28	2	15	27
Media	7	3	6	329	4	6	39
Automobiles&parts	5	1	2	6	1	3	4
Real estate	9	3	23	591	4	8	100
Clothes	11	2	5	153	3	4	74
Oil&gas	3	3	4	4	3	3	5
Food	15	1	6	65	1	3	21
<b>Total</b>	<b>115</b>	1	5	591	1	4	100

Source: own work based on ww1.



The standard deviations of the profitability ratios presented in Table 5 may seem relatively small (the median for all 115 companies is 5 percentage points for the ROS ratio and 4 percentage points for the ROS adjusted ratio). However, the profitability ratios also are of relatively low values: on average, it is about 5% for ROS and about 6% for ROS adjusted. Thus, standard deviations constitute even up to 100% of the average base values, which means that they are not small.

The sub-sectors, of which all companies showed relatively low profit volatility, include Automobiles&parts, Oil&gas and Construction. In general, the Real estate sub-sector companies showed high volatility of profitability. The Games sub-sector is also characterized by a high standard deviations of profitability ratios, but only one company from this industry entered the study, so it is difficult to assess to what extent this result is representative for the entire sub-sector.

It is also worth emphasizing that the standard deviation of ROS is generally higher than the standard deviation of ROS adjusted, which suggests that the assumption of high volatility of revenues other than sales and costs other than basic operating costs resulting in high volatility of net profit compared to basic operating net profit, seems to be true.

Charts 1–4 show a graphical illustration of the relationship between the non-current assets structure ratio and PPE structure ratio with standard deviations of ROS and ROS adjusted ratios.

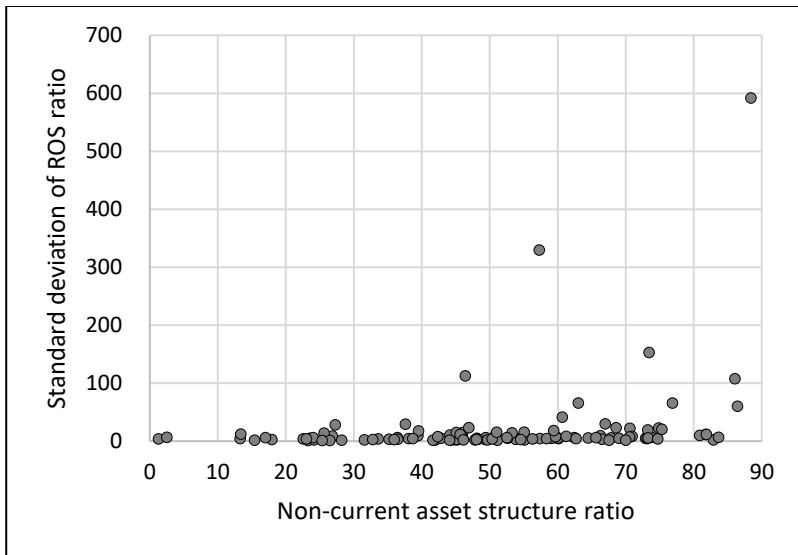


Chart 1. Relation between non-current asset structure ratio and standard deviation of ROS ratio

Source: own work based on www1.

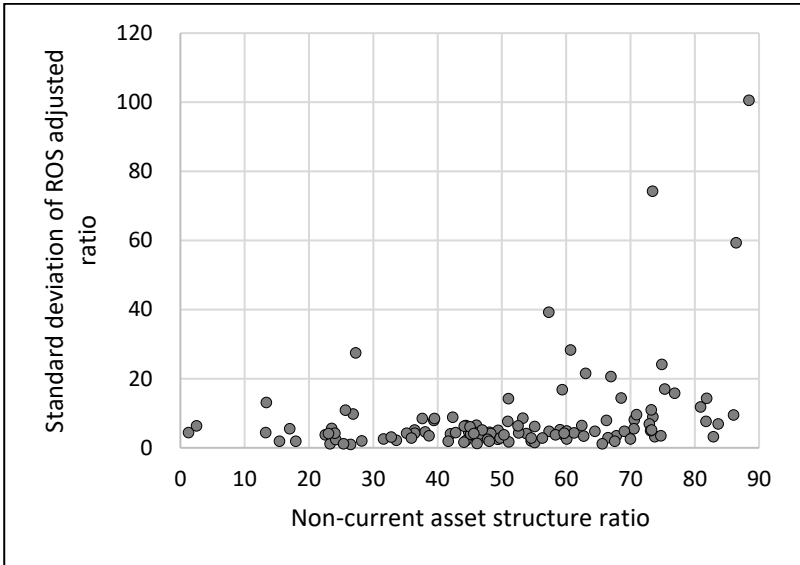


Chart 2. Relation between non-current asset structure ratio and standard deviation of ROS adjusted ratio

Source: own work based on ww1.

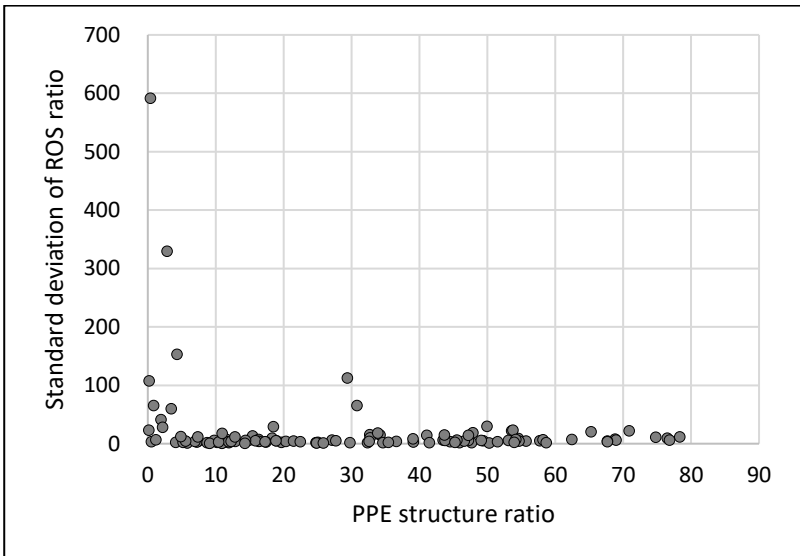


Chart 3. Relation between PPE (Property, Plant & Equipment) structure ratio and standard deviation of ROS ratio

Source: own work based on ww1.

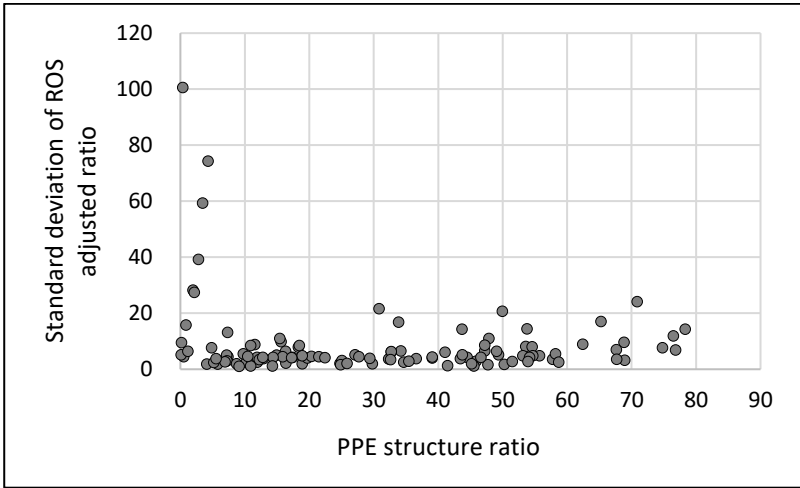


Chart 4. Relation between PPE (Property, Plant & Equipment) structure ratio and standard deviation of ROS adjusted ratio

Source: own work based on www1.

Charts 1 and 2 show that the positive correlation should be expected, while charts 3 and 4 suggest that the correlation would be negative.

The calculations of the correlation coefficients verifying the hypotheses for the second dataset are shown in Table 6.

Table 6. Correlation coefficients (and their statistical significance) for the second dataset (115 companies)

Volatility of profitability:	Asset structure:	Average non-current asset structure ratio	Average PPE structure ratio
Standard deviation of ROS		$r = 0.258$ (p value = 0.005)	$r = -0.215$ (p value = 0.021)
Standard deviation of ROS adjusted		$r = 0.337$ (p value < 0.001)	$r = -0.166$ (p value = 0.076)
Standard deviation of ROA		$r = 0.002$ (p value = 0.983)	$r = -0.091$ (p value = 0.333)
Standard deviation of ROE		$r = -0.135$ (p value = 0.150)	$r = -0.071$ (p value = 0.451)

Source: own work based on www1.

The correlations for ROS and ROS adjusted presented in Table 6 constitute the most important part of this study. It shows, primarily, that there is a weak but statistically significant correlation between the share of non-current assets in total

assets and the standard deviation of the ROS ratio and the ROS adjusted ratios. Based on this result, hypothesis 1 should be verified positively.

Then, the results obtained for the share of PPE in total assets are surprising, as negative correlation coefficients were obtained, and their statistical significance is also relatively high (the correlation for the ROS adjusted ratio is insignificant at the level of  $\alpha = 0.05$ , but significant for  $\alpha = 0.10$ ). Negative values of correlation coefficients are the basis for rejecting hypothesis 2, and their relatively high significance suggests that in the case of the share of PPE in total assets, the relation may be just the opposite as expected, i.e. that greater share of PPE results in smaller volatility (i.e. greater stability) of profitability.

The study was additionally extended by the analysis of correlation with ROA and ROE ratios, which are also popular measures of profitability. However, the obtained correlation coefficients are very low and statistically insignificant. It should be emphasized that this study indirectly analyzes the impact of the asset structure on the cost structure, which determines the level of operating leverage, therefore, the most appropriate measure of profitability for this study are ROS ratios (standard or adjusted). As it is known from the construction of the Du Pont pyramid, the ROA ratio is influenced not only by the level of operating leverage (like ROS ratio), but also by the total assets turnover (TAT), and the ROE ratio is additionally influenced by the use of liabilities. Probably the impact of these additional factors reduces the statistical significance of the results obtained for ROA and ROE and it makes these ratios less important for this study.

It is worth mentioning that the signs of the calculated correlation coefficients are generally consistent for both datasets: only 1 of the 6 correlation coefficients for non-current assets is a negative value (correlation with ROE volatility in the second dataset) and only 1 of the 6 correlation coefficients for PPE is a positive value (correlation with ROS adjusted for the first dataset), but in both of these exceptional cases the coefficients are statistically insignificant.

It was decided that the results of the study for the second dataset, being much more numerous than the first one and including individual, non-averaged data, are conclusive for the research, so the final conclusion is as follows:

- **hypothesis 1 should be considered as verified positively**, which allows to state that high share of non-current assets in total assets results in high volatility of profitability over time (for profitability measured by the ROS or ROS adjusted ratio);

- **hypothesis 2 should be rejected**, which means that high share of PPE (Property, Plant & Equipment) in total assets **does not result** in high volatility of profitability over time, and the relation is rather quite opposite: the higher share of PPE, the lower volatility of profitability.

## CONCLUSIONS AND DISCUSSION

In this study, the calculation of the correlation coefficients for the verification of the hypotheses was preceded by a preliminary analysis of the asset structure and the volatility of profitability in the research sample. The specificity of activity in some sectors (industries) quite unambiguously determines, respectively, a large or small share of non-current assets or PPE in total assets and the empirical data is generally in line with these expectations. There are some differences between the results for two datasets used in the study, but they are mainly due to a different way of qualifying companies to specific NACE sections and WSE sub-sector indices. Nevertheless, both datasets indicated that energy and mining industries are among those with the large shares of non-current assets and PPE in total assets, as well as with high volatility of profitability, while construction industry is characterized by rather small structure ratios and profitability deviations. Real estate is a particularly ambiguous industry in this respect.

The research hypotheses were empirically tested using two different datasets, which gives a broader picture of the subject of the study. Due to a much greater size of the second dataset and the way it is captured (data of individual companies), the study based on this dataset was considered conclusive. On the basis of correlation coefficients calculated for this dataset, it was decided that:

- hypothesis 1 should be considered as verified positively;
- hypothesis 2 should be rejected.

Such a conclusion enables to claim that high share of non-current assets in total assets results in high volatility of profitability over time (for profitability measured by the ROS or ROS adjusted ratio), but high share of PPE does not result in high volatility of profitability over time, and the relation is rather quite opposite: the higher share of PPE, the lower volatility of profitability (in other words, the profitability is more stable when the share of PPE is higher).

It has to be remembered that the correlations being the basis for these conclusions are weak, but statistically significant.

As mentioned before, the study examines the indirect relationship, according to which the asset structure impacts the cost structure, which in turn determines the degree of operating leverage and, as a result, the sensitivity of profitability to changes in sales. As the results show, empirical data supports the presumption of such a chain of relation in respect to non-current assets, but not to PPE, which is a surprising result of the study. As part of further research, to explain this discrepancy in results, the relationship between the non-current asset structure ratio and the PPE structure ratio was analyzed. The results are presented in the Chart 5.

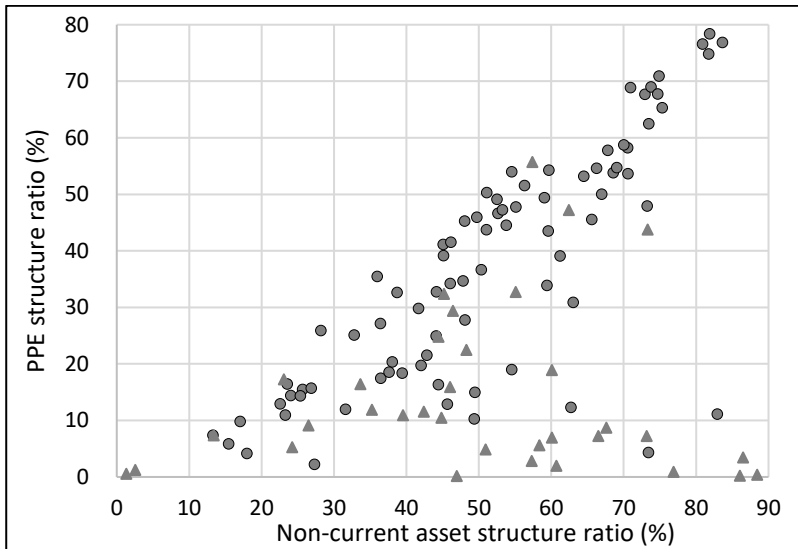


Chart 5. Relation between non-current asset structure ratio and PPE structure ratio

Source: own work based on [www1](http://www1).

Chart 5 shows that there is no typical, linear correlation between PPE structure ratio and non-current assets structure ratio, because, companies with a share of non-current assets in total assets greater than 50% are clearly divided into two separate groups; in the first group, the share of PPE is high (from 31% to 78% of total assets and from 49% to 99% of non-current assets), and in the second group the share is low (from 0% to 19% of total assets and from 0% to 35% of non-current assets). It was found that the latter group, with a significant difference between the PPE share and the share of non-current assets in total assets, consists mainly of companies from the following sub-sectors: Real Estate, IT, Games and Media (these companies are represented by the grey triangles on the Chart 5).

This may suggest that the mechanism of the asset structure impact on the volatility of profitability is more complicated, and while the positive correlation between non-current asset ratio and profitability volatility has been empirically proven, the impact of the non-current assets structure itself should be analyzed in more detail. Perhaps higher PPE share results in greater volatility of profitability only when PPE are the main non-current assets of the company, while they have a stabilizing effect on profitability when they are only an addition to other non-current assets, such as intangible non-current assets (typical for IT, games and media industries), or tangible investments, like properties built or purchased for sale or for rent (typical in real estate industry). These suppositions set further directions for potential research on the subject.

## REFERENCES

- Balios, D., Daskalakis, N., Eriotis, N. and Vasiliou, D. (2016). SMEs capital structure determinants during severe economic crisis: The case of Greece. *Cogent Economics & Finance*, 4(1).
- Bloom, N., Fletcher, R.S. and Yeh, E. (2021). The Impact of Covid-19 on US Firms. *NBER Working Paper Series*, Working Paper 28314.
- Delikanlı, İ. and Kılıç, S. (2021). Factors influencing SMEs' capital structure: A comparative analysis from Turkey. *Small Enterprise Research*, 28(1).
- Dewi, C.R., Fachrurrozie, F. (2021). The Effect of Profitability, Liquidity, and Asset Structure on Capital Structure with Firm Size as Moderating Variable. *Accounting Analysis Journal*, 10(1).
- Dominiak, J. (2022). Wpływ pandemii COVID-19 na zmiany w sektorze usług w Polsce. *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 36(2).
- Humeniuk, M., Shelenko, D., Kovalchuk, N., Balaniuk, I. and Kozak-Balaniuk, I. (2022). The Impact of Innovation on The Structure of the Assets of the Enterprises. *Economic Studies Journal (Ikonomiczeski Izsledvania)*, 31(4).
- Jabłońska, M., Stawska, J., Dziuba, R., Tekce, M. and Krasoń, M. (2021). Public Aid and Entrepreneurship During the Covid-19 Pandemic in the European Union Countries. *Journal of Finance and Financial Law*, 3(31).
- Kalogiannidis, S. (2020). Covid Impact on Small Business. *International Journal of Social Science and Economics Invention*, 06(12).
- Kalusová, L. and Badura, P. (2022). Factors Affecting the Capital Allocation into Fixed Assets of Slovak Enterprises. *Montenegrin Journal of Economics*, 18(1).
- Kenourgios, D., Savvakis, G.A. and Papageorgiou, T. (2020). The capital structure dynamics of European listed SMEs. *Journal of Small Business & Entrepreneurship*, 32(6).
- Nyamasege, D., Okibo, W.B., Nyang'au, A.S., Sang'ania P.O., Omosa H. and Momanyi C. (2014). Effect of Asset Structure on Value of a Firm: a Case of Companies Listed In Nairobi Securities Exchange. *Research Journal of Finance and Accounting*, 5(7).
- Okwo, I.M., Ugwunta, D.O. and Nweze A.U. (2012). Investment in Fixed Assets and Firm Profitability: Evidence from the Nigerian Brewery Industry. *European Journal of Business and Management*, 4(20).
- Olonite, O.A., Okoro, C.N. and Kfa, I. (2021). Impact of Assets Structure on Financial Performance of Quoted Construction Firms in Nigeria. *International Journal of Research in Academic World*, 1(2).
- Ooi, J. and Liow, K.H. (2004). Risk-Adjusted Performance of Real Estate Stocks: Evidence from Developing Markets. *Journal of Real Estate Research*, 26(4).
- Rapaccini, M., Saccani, N., Kowalkowski, C., Paiola, M. and Adrodegari, F. (2020). Navigating disruptive crises through service-led growth: The impact of COVID-19 on Italian manufacturing firms. *Industrial Marketing Management*, 88.
- Realne jest odbicie w kształcie „V”*. *Przynajmniej na razie* (2020). <https://biznes.interia.pl/gospodarka/news-realne-jest-odbicie-w-ksztalcie-v-przynajmniej-na-razie,nId,4734888> [Accessed 22.09.2020].
- Rutynskiy, M. and Kushniruk, H. (2020). The impact of quarantine due to COVID-19 pandemic on the tourism industry in Lviv (Ukraine). *Problems and Perspectives in Management*, 18(2).
- Saleh, H., Priyawan, S. and Ratnawati, T. (2015). The Influence of Assets Structure, Capital Structure and Market Risk on the Growth, Profitability and Corporate Values (Study In Manufacturing Companies Listed In Indonesia Stock Exchange). *International Journal of Business and Management Invention*, 4(12).
- Sama-Berrocá, C. and Corchuelo Martínez-Azúa, B. (2022). How Has the COVID-19 Pandemic Affected the Different Branches of the Agri-Food Industry in Extremadura (Spain)? *Land*, 11(938).

- Setiadharna, S. and Machali, M. (2017). The Effect of Asset Structure and Firm Size on Firm Value with Capital Structure as Intervening Variable. *Journal of Business & Financial Affairs*, 6(4).
- Stojczew, K. (2021). Ocena wpływu pandemii koronawirusa na branżę turystyczną w Polsce. *Research Papers of Wrocław University of Economics and Business*, 65(1).
- Such Devesa, M.J. and Parte Esteban, L. (2011). Spanish hotel industry: indebtedness determinants. *Applied Economics*, 43(28).
- Wpływ pandemii koronawirusa na poszczególne branże w województwie wielkopolskim w 2020 r.* (2021). Samorząd Województwa Wielkopolskiego, Wojewódzki Urząd Pracy w Poznaniu, Poznań.
- Zajac, A.A., Wielechowski, M.W. and Czech, K. (2021). The Impact of Covid-19 Pandemic on Credit Financing of Microenterprises and Farmer Business Activity in Poland. *Journal of Modern Science*, 2(47).
- Zimny, A. (2020a). Dodatek Kwartalny: Koniunktura w sektorze przedsiębiorstw niefinansowych. *Journal of Finance and Financial Law*, 3(27).
- Zimny, A. (2020b). Dodatek Kwartalny: Koniunktura w sektorze przedsiębiorstw niefinansowych. *Journal of Finance and Financial Law*, 4(28).
- Zimny, A. (2022). Dodatek Kwartalny: Koniunktura giełdowa. *Journal of Finance and Financial Law*, 1(33).
- (www1) [www.biznesradar.pl](http://www.biznesradar.pl) [Accessed 19.08.2022–29.10.2022].
- (www2) [www.stooq.pl](http://www.stooq.pl) [Accessed 19.08.2022–29.10.2022].
- (www3) [www.stat.gov.pl](http://www.stat.gov.pl) [Accessed 20.08.2022].

Zakończenie recenzji/ End of review: 10.10.2022

Przyjęto/Accepted: 18.11.2022

Opublikowano/Published: 07.12.2022



## INCLUSIVENESS OF FINANCIAL ACTIVITIES OF HOTEL INSTITUTIONS DURING THE COVID-19 PANDEMIC

Yuliia Melnychuk\*, Liudmyla Chvertko\*\*



<https://doi.org/10.18778/2391-6478.4.36.08>

### Abstract

Scientific work on “Inclusiveness of Financial Activities of Hotel Institutions During the Covid-19 Pandemic” aims to conduct a financial analysis of the state of the hotel services market in Ukraine and the world during the period of active progression of the Covid-19 virus infection.

**The purpose of the article.** The aim of the work was to study the peculiarities of the financial development of the hotel industry in the pandemic in the world and in Ukraine.

**The methodology.** The totality of research methods is a methodology for analyzing and organizing the main legislative acts and laws, namely the methods of generalization, comparison, chronology, analysis and generalization. Segment diagramming, elements of financial analysis, as a digital display of the state of the economic level of development are used to visualize the state of the hotel business market.

**The results of the research.** The study analyzes the level of change in sales revenue from the hotel business in Ukraine. The regions of Ukraine were divided into the main tourist regions and the structure of accommodation facilities by types and specialized accommodation facilities have been developed.

The scientific work considers the hotel industry as elements of the market of services of Ukraine, so the distribution of accommodation is divided into the following regions: central region, northern region and western and southern regions. The location of hotel business establishments is appropriately structured.

Conclusions that were made indicate the need to improve the quality of services while expanding their range, which is due to the ever-increasing demands of consumers in accordance with the requirements of advanced technologies. A significant expansion of the range of accommodation (apartments, villas, holiday homes, country and guest houses, chalets, etc.) will best guide different groups of tourists and diversify the types of recreation.

The presented paper depicts relevant and necessary research that will help hotel business leaders to respond in a timely manner to financial threats. During the Covid-19 pandemic, it is important to monitor the state of the Ukrainian services market, timely implement all possible security measures and prevent the impact of adverse factors on the development of the hotel business.

**Keywords:** Covid-19, hotel business, UHRA, region, hostel, accommodation, finance.

**JEL Class:** F65.

\* Ph.D. in Economics, Associate Professor of the Department of Finance, Accounting and Economic Security; Pavlo Ty-chyna Uman State Pedagogical University; e-mail: [melnichyk\\_yuliya@ukr.net](mailto:melnichyk_yuliya@ukr.net) <https://orcid.org/0000-0003-4149-0205>

\*\* Ph.D. in Economics, Associate Professor of the Department of Finance, Accounting and Economic Security; Pavlo Ty-chyna Uman State Pedagogical University; e-mail: [luda\\_um@ukr.net](mailto:luda_um@ukr.net) <https://orcid.org/0000-0003-2788-6991>

## INTRODUCTION

Hospitality is an important component of Ukraine's services. Its effective functioning is an indicator of positive changes in the economy of our country, an important prerequisite for the intensification of international relations and integration of the country into the world community. However, almost all hospitality establishments have faced new challenges, the most important of which is currently adapting to work in a pandemic.

The Covid-19 pandemic has led to a decline in the service sector, which has resulted in the closure of many hotels, restaurants and other hospitality establishments. Governments are closing borders, canceling flights, restricting transportation, which hinders the movement of tourists, both within Ukraine and between countries, and leads to their internal isolation.

The current situation is forcing the hotel and restaurant business around the world to adapt as quickly as possible to new realities. The task of enterprises is to restructure their business processes and quickly reduce costs. The extreme measures that companies have to resort to are maximum savings, reduction of operating costs, abandonment of outsourcing services, reduction of working hours, reduced wages, rental vacations for the quarantine period, suspension of investment plans.

The risk of rapid spreading of highly infectious COVID-19 variants determined a combination of measures consisting in border controls, mass testing, vaccines, quarantine procedures and lockdowns (Opriş et al., 2022: 605–610). COVID-19 is an unembellished problem not only for one particular country but globally. All individuals exist in time without any precedents. This horrible pandemic not only affects human health but also has impact on the society, environment, and the business world (Lenka and Kar, 2021: 41–50).

As the hotel business is closely linked to other areas, its support is very important because this industry fuels many other companies that provide cleaning and security services, produce and supply food, develop software, maintain engineering systems and etc. (Melnychuk, 2021: 62–64).

Therefore, the question of how to keep your business after the pandemic is the most pressing issue.

## 1. LITERATURE ANALYSIS

Finance plays an important role in the hotel business. Analysis and management of finance is a necessary component of business activation, ensuring proper control and organization of the monetary components of a company such as a hotel or restaurant. This industry is quite different from other service industries, but

a number of problems similar to other types of business may appear such as advertising costs and payback, or employee compensation, etc. There are a number of issues that are specific to managing money in the hospitality industry, such as a need to control food costs, etc. The financial part of doing business is one of the main links of the whole process and should be under constant control and analysis.

Of special attention, the state of finances began to interest the management during the onset of the global Covid-19 pandemic. Since the main function of the study of the finances of the hotel business in general is to ensure the proper handling of the financial resources of the business, in times of crisis many companies, regardless of the type of work in which they are involved, must balance their incoming income with outgoing expenses paid to employees and distribution users of products used by this company. Operating costs can also be a major problem, especially in times of crisis, when financially overseeing a hotel business, such as rent or taxes paid for the physical location of the business, which can be very high in some profitable locations. Today, during the pandemic, an important area of activity for the hotel industry is the introduction of effective security measures and improving the quality of hotel services.

Some aspects of the functioning of the hotel industry are presented in the scientific works of domestic and foreign authors: S.I. Baylik, V.A. Azara, R.A. Braimer, O.P. Durovich, An. Iyengar, M.I. Kabushkina, V.I. Karsekina, V.A. Kvartalnova, N.M. Kuznetsova, Yu.M. Melnychuk, G.A. Papyryana, T.I. Tkachenko, A.D. Chudnovsky, D. Walker, T.A. Horova and others.

However, they do not sufficiently cover the fundamentally important issues related to the comprehensive study of the hotel industry and scientific substantiation of problems and prospects of the hospitality industry. They have not developed any priorities and objectives of their economic stability for crisis situations in the economy, especially when it comes to a pandemic (Azarian and Donets, 2013: 111–119).

In the work of Iyengar An. entitled *Hotel Finance*, the author pays great attention to the creation of a certain financial culture, which is focused on obtaining high profitability for the owners, while at the same time creating joint social benefits for the customers, of which we are a part. It is worth agreeing with the opinion of the author, but the factors affecting the level of profitability during the global crisis differ sharply from influencing factors in an economically stable environment. Therefore, one should deeply consider the conditions of doing business and take into account unforeseen risks (Iyengar, 2008: 19–33).

According to C.P. Krishnan Nair, the key to long-term financial stability in the hotel business is: growth in investment, growth in revenue and growth in return on capital employed. It is worth agreeing, because such a vision of business

development is natural and captures the satisfaction of the goal of any business i.e. obtaining maximum profits (Iyengar, 2008: 8–19).

Gittens S. believes that as soon as the outbreak of Covid-19 occurred, it became clear how many trustworthy customers of the hotel business were affected by financial problems of the industry. One way to solve this problem is to find experienced and reliable professionals in the field of finance. Financial success also depends on accountability – the responsibility of employees and managers to meet financial goals of their respective functional area (Gittens, 2022). Professionalism in this case is closely related to in-depth research into this problem, analysis and planning of financial activities of the hotel business.

British scientists studying the hotel business came to the conclusion that all hotel owners should have a good understanding of the financial aspects of hotel management i.e. timely bookkeeping, filling out forms and dealing with complex numbers. The more difficult the financial situation at the end of the financial year, as a result of the pandemic, the more work will have to be done. By implementing practical financial controls from day one, you will have a good idea of your cash flows, profitability and tax liabilities throughout the year (Assetsure, 2022). It is worth agreeing with such an opinion, which is relevant and active, especially for business in Ukraine. Any petty cash borrowings must be taken into account, while any income received must be allocated to the profit and loss account and included in your personal tax calculation. Using just one accountant will have the added benefit of minimizing your overall tax burden as your accountant will be prepared to look at the bigger picture with all the information available. Using two accounting firms or two individuals creates unnecessary duplication, confusion, uncertainty and doubt, which will inevitably lead to a higher accounting bill at the end of the year.

Therefore, the study of problems and prospects for the development of the hotel business during the pandemic is very relevant and necessary for the development of the services market. In the situation of deep biological crisis (as opposed to economic crises), the social factor will ultimately have the final word at the expense of all other factors (Rydzewski, 2021: 15–21).

## **2. OBJECT, SUBJECT AND METHODS OF RESEARCH**

The object of study – the activities of hotel facilities in a pandemic.

The subject of the research is the role of strategic development of the world and Ukrainian hotel establishments in the conditions of a pandemic.

Research methods include: a survey method (data collection), a method of information processing and analysis, an empirical method, logical-structural, statistical and graphical methods of information processing and provision, as well as comparative, economic and financial analysis.

The information base of the study consists of laws and regulations of Ukraine, other states, international legal documents; statistical data, rating materials; reference books, Internet; reporting data and accounting reports of individual hotel complexes, namely: “Balance Sheet”, “Statement of financial performance of the enterprise”, “Statement of cash flows”. The data of monographic and periodicals, materials of international, all-Ukrainian scientific-practical conferences and Internet resources are also used in the work.

### 3. RESULTS

The coronavirus pandemic has caused serious damage to the hotel business in Ukraine, and it may take more than a year for the sector to recover.

According to the study, 93% of respondents confirmed a general decline in revenue of their hotel, in 21% of hotels gross revenue decreased by 25–40%, in a third of hotels – by 40–60%, in 30% of hotels such reductions reached more than 60%. Only 4% of hotels showed an increase in annual revenue, and for 2% it remained at the same level (see Figure 1 below).

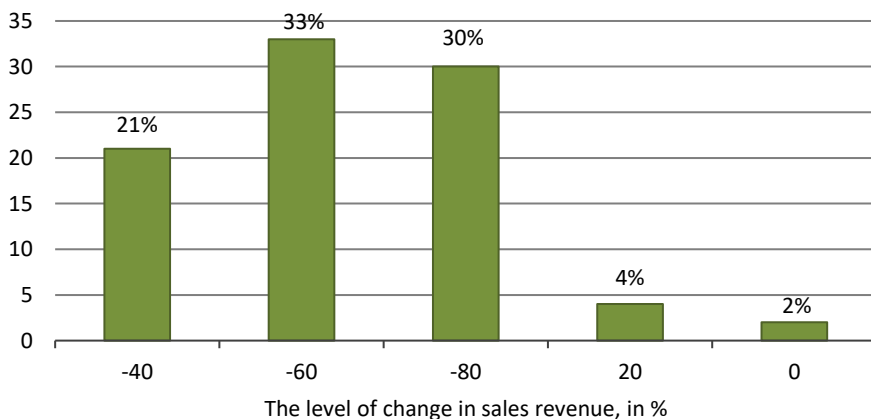


Figure 1. The level of change in sales revenue from the hotel business of Ukraine in 2020

Source: own study based on DiXi Group, 2021.

66% optimized their costs by reducing staff, 2/3 reduced prices for their services, 63% of respondents improved their product and services (repair, repositioning, updating standards and working conditions with suppliers, changing equipment, etc.). 1/3 of respondents introduced digital and marketing tools, 27% introduced alternative services (coworking, office suites, etc.), 7% decided to repurpose some of the premises, for example, for rent for gambling establishments.

There is no planning horizon, closed borders, a huge share of inbound tourism. The Ukrainian tourism industry has not received such a rapid systemic support from the government as in neighboring EU countries. As the industry as a whole has a very high cost structure, such a total reduction in revenue has been simply detrimental to most hotels.

The survey involved 122 hotels with an average of 72 rooms. In Ukraine, according to 2019, there are a total of 3,165 hotels and motels, excluding hostels, resorts and dormitories.

According to the State Agency for Tourism Development of Ukraine, it can be concluded that the demand for hotel services due to the pandemic is currently low and losses to the market are significant. However, the government is planning a number of measures to support the hotel sector (Borysiak and Brych, 2021: 302–309).

The Association of Hotels and Resorts of Ukraine (UHRA) is a public organization that unites accommodation establishments and companies working in the hotel industry for their sustainable development. The association represents the united position and interests of hotels in the domestic and foreign markets.

If the overall losses in the field of tourism in the world are about 800 billion dollars, in Ukraine, it is about 60 billion hryvnias, which the industry has lost over the last year. The budget of UAH 100 million provides a significant part of the funding for the creation of a single tourist register, in which we can register all accommodation and other resources of businesses. Additionally, relevant statistics are obtained as well as operational data on a monthly basis, which is necessary to properly plan marketing activities and attract investors to the industry.

According to the people involved in that industry, the recovery of the hotel business in Ukraine after the restrictive measures due to the pandemic may take more than one year.

The hotel industry sector today is the most popular and dynamic sector of Ukraine's economy, capable of bringing real profits. Taking into account today's trends in the industry, innovation and comfort in the hotel business play a major role in the highly competitive struggle of hotels for each client. The use of the latest technologies allows hoteliers to increase the efficiency of financial and economic activities, find new reserves to improve the quality of service, effective protection of hotel rooms and property of guests, providing new hotel services.

The study of the volume of investments in the fixed capital of the tourist regions of Ukraine shows that in 2018 more than 78% of the total investment is directed to the development of hotels and other places for short-term residence. For instance, 14% of the development of restaurants is noted in Kyiv, Kyiv, Odessa, Lviv regions; in 2017, the situation has hardly changed: 79% of investments are aimed at the development of hotel and restaurant business and especially hospitality enterprises (Burak, 2013).

An important guarantee of the development of this industry is a gradual increase in the number of foreign tourists who have received the services of tourism entities. The number of “domestic” tourists has increased significantly, in particular, due to family travel and the combination of business trips with leisure. At the same time, the number of active enterprises providing hotel and restaurant services in the regions of Ukraine decreased. This is due to the continuation of hostilities in eastern Ukraine and the temporarily occupied territories, as well as the annexation of Crimea with its unique natural and recreational potential. The economic factor is high competition, which is a prerequisite for intensifying domestic tourism and innovation.

As for the promising regions for development, there is a gradual shift towards the objects of tourist infrastructure and recreational and tourist economy of the country, in particular, regional health resorts.

The main areas are Odessa, Mykolaiv, Kherson and Zaporizhia regions. As for the western regions, these are the Carpathian and Polissya recreational regions (Melnychuk and Chyryva, 2021: 20–30).

This is evidenced by numerous media reports about the increase in tourist flows to these regions. This trend can further affect the simultaneous inflow of money capital from the intensification of the tourism business, which has shifted its desires to these regions, and the level of local budget revenues (Melnychuk et al., 2019: 584–590).

Analyzing the flows of tourists in some regions, we note that the flows of foreign tourists predominate in Kiev, Odessa, Lviv regions. In the Transcarpathian region, the number of foreign tourists has doubled in the last three years. In some regions (Rivne, Ternopil, Cherkasy, Kherson, Mykolaiv regions) in recent years there were no foreign tourists at all. The reason for this is the insufficient level of development of financial services and communication systems, the tourist infrastructure itself, as well as the poor quality of services, lack of marketing strategies aimed at developing the hospitality industry, and lack of trained staff.

The distribution of hospitality companies that provide temporary accommodation and meals in Ukraine by region is uneven, but given the climatic and geographical location of the regions and the presence of well-known cultural heritage is quite justified. The division of the regions of Ukraine into the main tourist regions (Table 1) by geographical location allowed to analyze the state of the hospitality industry in each of them, and then summarize this information.

Hotels and other accommodation facilities in Ukraine have changed their development to some extent over the last 3–5 years, which has been reflected in a 7–12% reduction in a number of sanatoriums and boarding houses with treatment. Although in 2017–2018, this trend decreased to 1.5–2.6%, the number of sanatoriums has decreased by 30%, and they are largely used only as accommodation facilities.

Table 1. Distribution of regions of Ukraine by the main tourist regions

Name of the region and the territories assigned to it				
Central	Northern	West	Southern	East
Vinnitsia	Zhytomyr	Volyn	Zaporozhye	Kharkiv
Dnepropetrovsk	Kyiv	Transcarpathian	Mykolayiv	–
Kirovograd	Kyiv–city	Ivano-Frankivsk	Odessa	–
Poltava	Sumy	Lviv	Kherson	Donetsk
Khmelnitsky	Chernihiv	Rivne	–	Luhansk
Cherkasy	–	Ternopil	–	–
–	–	Chernivtsi	–	–

Source: own study based on DiXi Group, 2021.

They are used by dynamic, unpretentious tourists, mostly young people, or those who travel for business, as the number of dormitories where they used to stay is gradually decreasing. The distribution of accommodation by region is uneven and corresponds to the economic and geographical location, the degree of development of the transport network and infrastructure, natural and climatic conditions, the availability of interesting places to visit: monuments of nature, architecture, history and culture (Tkachuk et al., 2020: 1606–1613).

It should be noted that in all regions of Ukraine, there are insufficiently developed marketing tools to attract tourists. Information on many services in the hospitality industry is either insufficient or non-existent, as the range of services is very limited. Insufficient use of marketing activities is evidenced by the fact that on major tourist sites information about accommodation is much more modest and available information concerns about only half of the hospitality industry. Thus, on the well-known international Internet resource Booking.com, information is available on only half of enterprises across Ukraine compared to the data of the State Statistics Committee.

Analysis of the distribution of accommodation according to Internet resources (Figure 2, 3) (DiXi Group, 2021) shows that only in Lviv, Kyiv (at the expense of Kyiv), Odessa and Kharkiv regions, there is information about 70–85% of accommodation. This indicates ill-conceived marketing strategies or their absence at all. The distribution of accommodation in the central region, with the exception of the Kirovohrad region, is almost proportional.



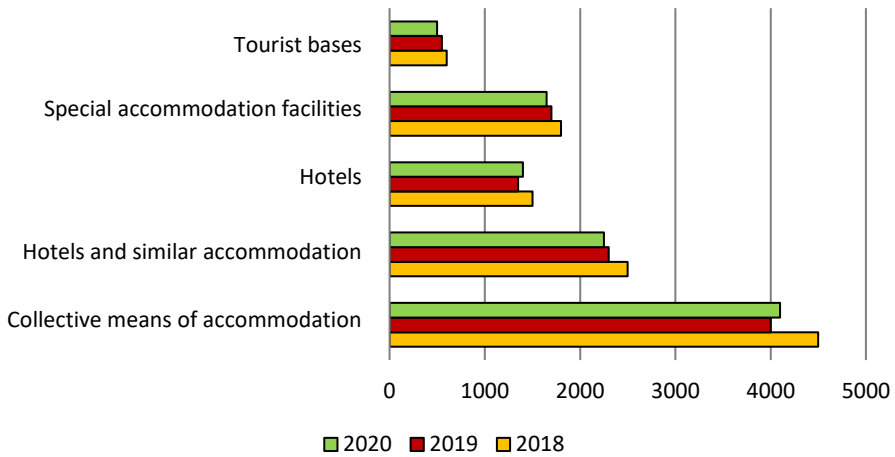


Figure 2. Distribution of accommodation by types, units

Source: own study based on DiXi Group, 2021.

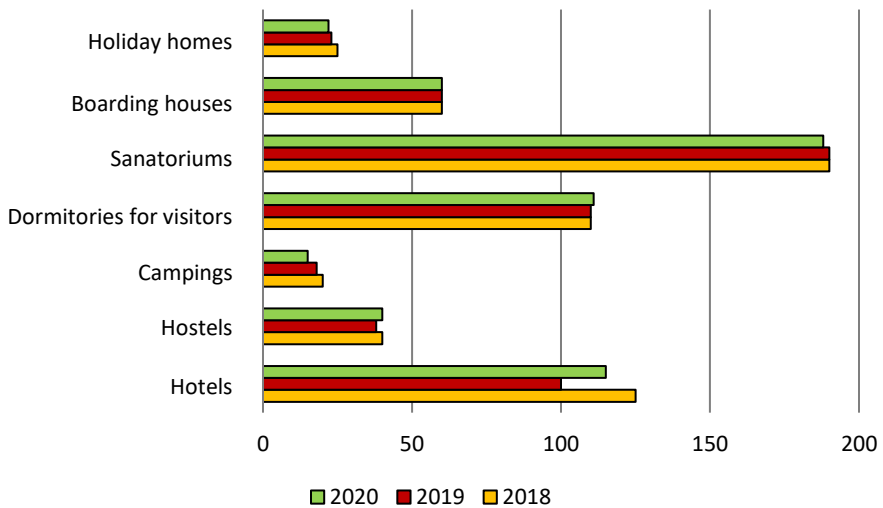


Figure 3. Distribution of accommodation facilities by specialized accommodation facilities, units

Source: own study based on DiXi Group, 2021.

The state of material support is also average, services are standard and do not differ in variety. As of the end of 2018, the number of collective accommodation facilities in Dnipropetrovsk region was 253 units, compared to 2019, their number

decreased by 12 units. The number of places in such facilities in 2018 was 25.5 thousand units, and the number of placed persons – 418.3 thousand people. In 2020, 160 enterprises began to operate in the Dnipropetrovsk region, most of which are hotels (50%), business hotels (27.3%), 4 motels and 11 hostels (Figure 4).

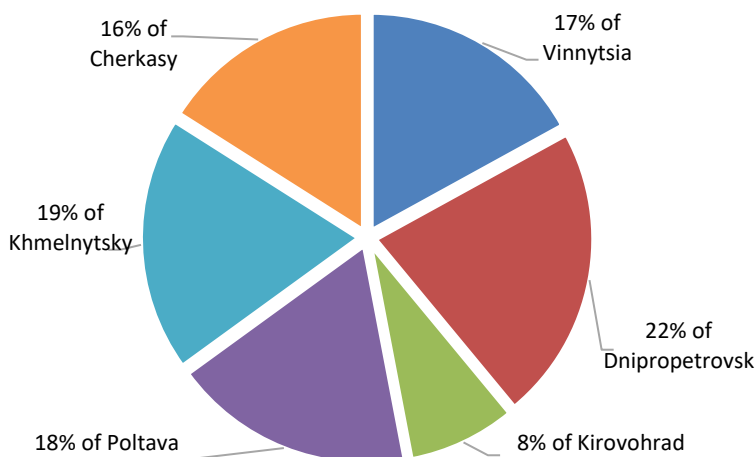


Figure 4. Distribution of accommodation in the regions of the central region

Source: own study based on DiXi Group, 2021.

The state of the hotel industry in this region is characterized by a small number of high-class hotels, single hotels have an “interest” that becomes their “business card” and attracts customers. The middle service segment is represented by a sufficient number of institutions. Prospects for the development of the hotel sector in the Dnipropetrovsk region are associated with an increase in the number of certified hotel enterprises in the budget price category, in particular, churches and one-star hotels.

Among all oblasts of the northern region (Figure 5) the leader is Kyiv oblast at the expense of Kyiv itself, where high-class hotels are available: the tendency to 4–5 stars is 83%, and the largest number of hotel chains is 10.

However, the main purpose of traveling to Kyiv is business, acquaintance with culture and recreation are almost non-existent. The western region is the largest in number of oblasts. The distribution of accommodation in the western region is shown in Figure 6.

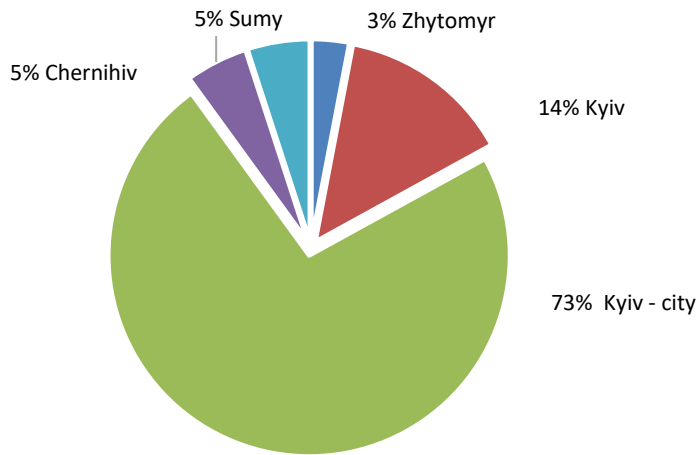


Figure 5. Distribution of accommodation in the northern region

Source: own study based on DiXi Group, 2021.

According to official statistics and Internet resources, the Lviv region is the leader in receiving guests. Over the past five years, it has ranked fourth in Ukraine in terms of the number of tourists, receiving almost 65% of all guests in the western region.

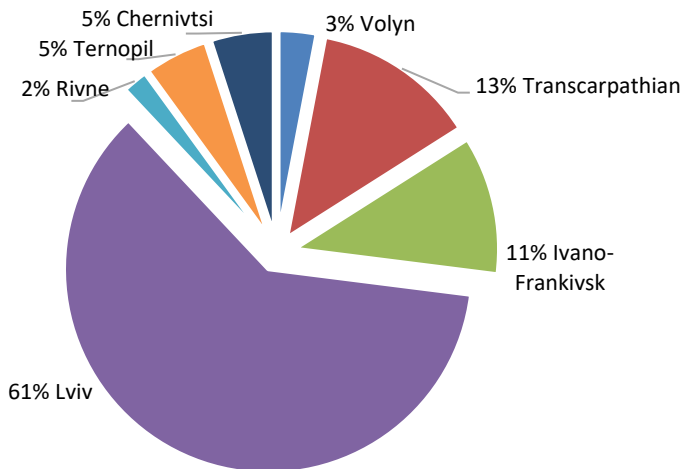


Figure 6. Distribution of accommodation in the western region

Source: own study based on DiXi Group, 2021.

According to the official data of the regional statistics department, Lviv region is visited by 130 to 200 thousand tourists every year for various purposes. Market operators believe that the region actually receives more than half a million guests. In the Ternopil region is a third of all castles and castle buildings that have survived in Ukraine. For rest and treatment in the Ternopil region, there are 20 sanatoriums created on the basis of local healing mineral waters. Despite the huge recreational and tourist resources, the infrastructure associated with tourism is under development. The main, most pronounced areas of tourism development are: recreational, cognitive, sightseeing, rural, green, water, speleotourism, mountain and ecotourism. In Rivne region there are favorable natural conditions and the necessary infrastructure for the development of extreme sports and health tourism, as there are 127 lakes, 12 reservoirs. There is also a potential for the development of pilgrimage, because in the region in the village of Onishkovtsi (Dubensky district) there is a miraculous spring of St. Anne with healing water. In all oblasts of the western region, except Lviv, the infrastructure is poorly developed, the number of additional services is insufficient. The buildings of hotel and restaurant enterprises require complete reconstruction, little attention is paid to the opening of new hospitality enterprises. However, green tourism, recreational and speleotourism with mountain tourism (in Chernivtsi region) and pilgrimage tourism (Rivne region) are actively practiced in this region. Most hotels are located in the main administrative centers. Many estates and houses are located outside the city. In general, you can provide recommendations to improve infrastructure, develop hotel businesses and open some new ones. Start financing ecotourism, recreational tourism, pilgrimage tourism, for which to develop new routes and make improvements to the existing ones. The material base of accommodation in the southern region is quite good, as this region is traditionally a resort and has a long tradition of receiving guests with different needs (Figure 7).

In the Nikolaev area, according to tourist sites, the category “option for vacation” and “hotels without stars” prevails. Most tourist flows are directed to Koblevo. In the Kherson region, there is access to two seas – Azov and Black, but recently the healing potential and unique natural objects are almost not used. The big problem of this area is the short duration of the tourist season. Recreation facilities are full at full capacity for only two months, and the actual duration of the bathing season is 3.5 months. Therefore, it is necessary to more intensively develop “green” and ethno-tourism, involving farms. Despite the presence of a sanatorium and resort base in the Odessa region, the purpose of the trip “treatment” is extremely low. No foreign tourist bought a tour to the Odessa region for the sake of improving health, which was reflected in the reduction in the number of sanatoriums and rest homes with health treatments. Domestic tourists have also almost stopped using sanatorium treatment, but this is mainly due to the low purchasing power of the population of Ukraine and the lack of social support for both trade unions, which previously took care of this area, and the state as a whole.

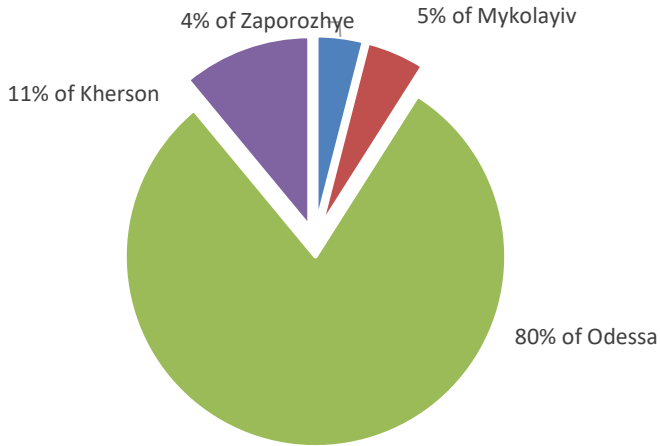


Figure 7. Distribution of accommodation in the regions of the southern region

Source: own study based on DiXi Group, 2021.

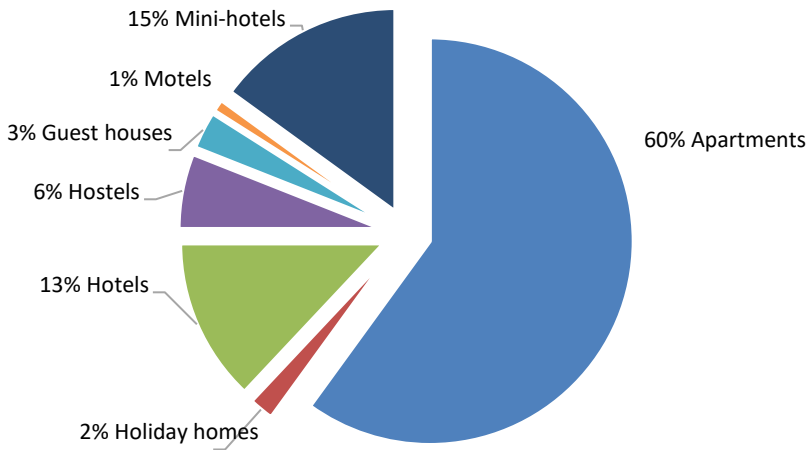


Figure 8. The structure of the hotel business in 2020

Source: own study based on DiXi Group, 2021.

The material and technical condition of hospitality enterprises in Odessa region is quite decent, recently actively working to provide services in the Gulf, Belgorod-Dniester and other resort towns. As far as active tourist areas are

concerned, in summer it is the lowest in resort areas – in summer and winter it is the highest. Also, the load of hotels during the year, as a rule, is still uneven and on weekdays – on weekends it decreases, increasing on weekdays due to those who are on a business trip. Significant competition for hotel enterprises, including large hotels, is created by individuals – business entities, which mainly maintain small hotels and own private houses and apartments (Skorokhod and Horbach, 2021: 456–464).

Only those hotels that can offer their customers high-quality service can withstand fierce competition, and this is impossible without professionally trained staff.

To improve the situation in all regions of Ukraine, regardless of the focus on foreign or domestic tourists, it is necessary to focus on the following issues (Kozlovskiy et al., 2021: 26–33):

- expansion of types (range of services) and their quality;
- increasing the variety of accommodation (boutique hotels, guest houses, hostels, networking of the hospitality industry);
- development of transport services (expansion of the range and quality of services) and improving the quality of transport infrastructure;
- development of the range and increase the availability of financial services (both investment for enterprise development and services for tourists);
- development of services and communication systems (including in the field of informatization and telecommunications, development of online services) to create comfortable living conditions;
- development of tour operator activities and preparation of network, complex and thematic tour products, the possibility of combining them on individual orders;
- development of information support for the hospitality industry, marketing, creation of new and advertising of already known tourist routes;
- strengthening the role of health and medical direction and focusing on the needs of different categories of tourists;
- legislative and investment support by the state for hotel and restaurant enterprises, primarily those that implement innovations.

The general trend identified as a result of research in all regions of Ukraine is to determine the need for innovation and new partnerships, in particular, between travel agencies and hotels and restaurants, government and self-government for the effective development of regional infrastructures.

This should, first of all, be realized through mechanisms of cooperation with the involvement of various sources of funding. In recent years, the structure and development strategy of hotel enterprises have changed significantly. In the regions where there is an increase in their number, there has been significant differentiation. It largely depends on the economic capacity of domestic tourists

and the increase in the number of high-end enterprises for wealthy tourists and foreigners.

In Ukraine, since 2020, the total number of special accommodation facilities has decreased by 11.9%, while the total number of special accommodation in the Lviv region has increased by 3.4%. The number of collective accommodation facilities provided by legal entities and entrepreneurs in Ukraine as a whole decreased by 5.2%, and increased in: Ivano-Frankivsk region – by 19.1%; Kyiv region – by 2.5%; Kyiv – by 6.4%; Khmelnytsky region – by 3.4%; Lviv – by almost 2%.

In other areas, significant changes have taken place in the distribution of accommodation: the number of apartments has almost doubled, and the number of hostels is gradually increasing. The management of many hotels is reviewing the policy of providing services and is becoming more meticulous in determining the category of hotels and their compliance with international standards. The proliferation of hotel chains is also positive as they have begun to appear in regions where infrastructure needs to be developed, roads, in particular.

Dealing with the effects of COVID-19 is on the security agenda. Consolidation of efforts at the regional, national and international levels to exchange experience in the implementation of successful practices and the formation of institutional support of the sustainable development contributes to the post-COVID-19 revitalization (Borysiak, 2021: 302–309).

## **CONCLUSIONS**

As a result of the analysis of the current state and trends of hotel business development in the regions of Ukraine, it has been concluded that in recent years the structure and strategy of hotel development has changed significantly. Today, it is necessary to improve the quality of services while expanding their range, which is due to the ever-growing demands of consumers in accordance with the requirements of advanced technology. A significant expansion of the range of accommodation (apartments, villas, holiday homes, country and guest houses, chalets, etc.) will best guide different groups of tourists and diversify the types of recreation. The prospect of further research should be to identify strategic alternatives for the development of hospitality enterprises in the regions of Ukraine, taking into account their natural and climatic conditions and specific features.

The main conclusions of the study were the following provisions:

1. The review of research provisions regarding the financial activation of the hotel business showed that most scientists are deeply convinced of the need for constant control, analysis and planning of the hotel business in order to avoid

a sharp decline in income during periods of crisis, especially during the Covid-19 pandemic.

2. The hotel business of Ukraine flourished in 2018 and rapidly began to decline with the onset of the pandemic in 2019. The period of 2020–2021 was a stage of adaptation to the global crisis for the hotel business. Many small hotels have ceased their activities. A large number of them were adapted for mixed services, and only a small part remained at its level.

3. The company is obliged to act socially responsible, in the interests of society. The goal of maximizing the owner's welfare does not absolve the owners of their responsibility to the society in which they operate. And therefore, finances during the crisis come to the level of ensuring the social effect, which is in the first place, and only then – profits. However, such an opinion is unjustified from a financial point of view.

4. Finance is closely related to the economy. For the hotel business, it is important to know the concepts and principles of macro- and microeconomics, and to understand the business environment. That is why the analysis of hotel accommodation zones directly affects future plans and business organization, financial results and solving business problems.

During the Covid-19 pandemic, it is important to monitor the state of the Ukrainian services market, timely implement all possible security measures and prevent the impact of adverse factors on the development of hotel and restaurant business.

## REFERENCES

- Assetsure (2022). *Dealing with hotel finance*. <https://www.assetsure.com/business/hotel-insurance/hotel-financial-management/> [Accessed 12.07.2022].
- Azarian, O.M. and Donets, A.A. (2013). Scientific and practical approach to assessing the competitive state of the enterprise in the market of hotel services. *Trade and market of Ukraine*, 36.
- Bailik, S.I. (2008). *Hotel industry. Organization, management, service*. Kiev: Dakor.
- Borysiak, O. and Brych, V. (2021). Methodological Approach to Assessing the Management Model of Promoting Green Energy Services in the Context of Development Smart Energy Grids. *Financial and credit activity: problems of theory and practice*, 4(39). <https://doi.org/10.18371/fcaptop.v4i39.241319> [Accessed 01.07.2022].
- Burak, T.V. (2013). Development of contract management of hotel chains in Ukraine. *Economy. Management. Innovation*, 1.
- DiXi Group. (2021). *Quarterly report 1. World best practices of green recovery during the COVID-19 pandemic: opportunities for Ukraine*. [https://dixigroup.org/wp-content/uploads/2021/04/dixi\\_greenrecovery\\_qr1-1.pdf](https://dixigroup.org/wp-content/uploads/2021/04/dixi_greenrecovery_qr1-1.pdf) [Accessed 21.07.2022].
- Dudkevych, Yu. A. (2016). *Problems and opportunities to increase hotel profits in modern conditions*. [http://nbuv.gov.ua/UJRN/mnj\\_2016\\_1%282%29\\_10](http://nbuv.gov.ua/UJRN/mnj_2016_1%282%29_10) [Accessed 15.06.2022].
- Gittens, C. (2022). *Financial management in the hospitality industry*. <https://www.instituteofhospitality.org/financial-management-in-the-hospitality-industry/> [Accessed 01.07.2022].



- Iyengar, An. (2008). Factors Affecting the Hotel Industry. *Hotel Finance*. Oxford University Press. <https://india.oup.com/productPage/5591038/7421214/9780195694468> [Accessed 17.06.2022].
- Kozlovskiy, S., Bilenko, D., Kuzheliev, M., Ivanyuta, N., Butenko, V. and Lavrov, R. (2021). Comparison and Assessment of Factors Affecting the COVID-19 Vaccination in European Countries. *Problemy ekorozwoju – Problems of sustainable development*, 16(2). <https://dx.doi.org/10.35784/pe.2021.2.03> [Accessed 12.07.2022].
- Lenka, P. and Kar, S. (2021). Transformational Leadership: An Approach of Business Sustainability during the COVID-19 Pandemic with Special Reflection to India. *Problemy ekorozwoju – Problems of sustainable development*, 16(2). <https://dx.doi.org/10.35784/pe.2021.2.05> [Accessed 15.06.2022].
- Melnychuk, Yu. M. (2020). Directions for increasing the financial stability of enterprises in an independent region. *Current problems of regional development*, 16(2). <https://journals.pnu.edu.ua/index.php/aprde/article/view/4586> [Accessed 01.08.2022].
- Melnychuk, Yu. M., Chyrva, G.M. (2021). World's latest approaches to resource provision of the autonomous educational process. *Current issues of economic development of the region*, 17(2). <https://journals.pnu.edu.ua/index.php/aprde/article/view/5573> [Accessed 01.08.2022].
- Melnychuk, Yu. M., Chyrva, O.H., Chvertko, L.A., Chyrva, H.M., Berbets, V.V. (2019). The Role of Management in the Financial Independence of the Region. *Tem Journal*, 8(2). <https://dx.doi.org/10.18421/TEM82-35> [Accessed 12.07.2022].
- Melnychuk, Yu. M. (2021). *The importance of financing “green” innovations in the tourism business of independent regions. Management of tourism development and hotel and restaurant business in the circular economy*. Materials I International. science and practice Internet Conf. (May 18, 2021). Lutsk: Lutsk National Technical University. <http://dspace.udpu.edu.ua/handle/123456789/14318> [Accessed 14.06.2022].
- Oprış L. et al. (2022). Exploring Engineering Students' Perception on using Augmented Reality to Improve Learning Performance in the Context of COVID-19 Pandemic. *TEM Journal*, 11(2).
- Rydzewski, P. (2020). Between Economy and Security. Dilemmas of Sustainable Development in the Covid-19 Era – an Example of Great Britain. *Problemy Ekorozwoju – Problems of Sustainable Development*, 15(2). <https://dx.doi.org/10.35784/pe.2020.2.02> [Accessed 01.06.2022].
- Skorokhod, I.S. and Horbach, L.M. (2021). Innovation-investment provision of regional environmentally safe development. *Financial and credit activity: problems of theory and practice*, 3(38).
- Tkachuk, I., Melnychuk, Y., Tkachuk, Yu., Solodzhuk, T. and Kyryliuk, I. (2020). Economic Mechanism for Managing the Strategic Development of Territorial Communities. *Tem Journal*, 9(4). [https://www.temjournal.com/content/94/TEMJournalNovember2020\\_1606\\_1613.pdf](https://www.temjournal.com/content/94/TEMJournalNovember2020_1606_1613.pdf) [Accessed 12.07.2022].

Zakończenie recenzji/ End of review: 30.11.2022

Przyjęto/Accepted: 04.12.2022

Opublikowano/Published: 22.12.2022





## DODATEK KWARTALNY

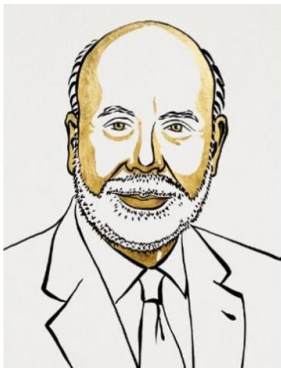
### Laureaci Nagrody Banku Szwecji im. Alfreda Nobla w dziedzinie ekonomii w 2022 roku

**Marta Paduszyńska\***

W 2022 roku Nagrodę Banku Szwecji im. Alfreda Nobla w dziedzinie ekonomii przyznano trzem naukowcom z USA za „badania nad bankami i kryzysami finansowymi”.

Nagrodzeni naukowcy to (www1):

- Ben S. Bernanke (ur. 1953);
- Douglas W. Diamond (ur. 1953);
- Philip H. Dybvig (ur. 1955).



Ben S. Bernanke



Douglas W. Diamond



Philip H. Dybvig

Fot. 1. Laureaci Nagrody Nobla – the Nobel Prize

Źródło: www1.

Ben S. Bernanke wykazał, że upadające banki odegrały decydującą rolę w globalnym kryzysie lat trzydziestych XX wieku, wykazując dłaczego run na banki był decydującym czynnikiem pogłębiania się Wielkiego Kryzysu. Badacz podkreślił tym samym znaczenie dobrze funkcjonujących regulacji bankowych (www2).

---

\* Mgr, Wydział Ekonomiczno-Socjologiczny, Uniwersytet Łódzki.

Douglas W. Diamond i Philip H. Dybvig opracowali modele teoretyczne wyjaśniające, w jaki sposób panika wywołana wśród deponentów może doprowadzić do upadłości banku (biorąc pod uwagę finansowanie długoterminowych kredytów poprzez płynne depozyty) (www3).

Przewodniczący Komitetu Nagrody w dziedzinie Nauk Ekonomicznych, Tore Ellingsen, podkreślił, że intuicja laureatów poprawiła zdolność do unikania zarówno poważnych kryzysów, jak też kosztownych działań ratowania banków (*Press release: The Prize in Economic Sciences 2022*). Analizy laureatów mają ogromne znaczenie praktyczne w odniesieniu do regulowania rynków finansowych i działań w związku z kryzysami finansowymi.

### **Bibliografia:**

*Press release: The Prize in Economic Sciences 2022.* <https://www.nobelprize.org/prizes/economic-sciences/2022/press-release/> [dostęp 22.11.2022].

(www1) <https://www.nobelprize.org/prizes/economic-sciences/2022/summary/> [dostęp 22.11.2022].

(www2) <https://www.nobelprize.org/prizes/economic-sciences/2022/bernanke/facts/> [dostęp 22.11.2022].

(www3) <https://www.nobelprize.org/prizes/economic-sciences/2022/diamond/facts/> [dostęp 22.11.2022].

---

## Zmiany w świecie podatków – poprawa Polskiego Ładu

**Radosław Witczak\***

Rok 2022 w polskim świecie podatków zostanie zapewne na długo zapamiętany nie tylko przez ekspertów podatkowych i księgowych jako rok Polskiego Ładu. Po jego wprowadzeniu okazało się, że zmienione od 1 stycznia przepisy nie w pełni zrealizowały zamierzone cele. Rząd zdecydował się na wprowadzenie zmian, które miały za zadanie polepszyć wprowadzone w styczniu przepisy. Nowe regulacje co do zasady dotyczą podatku dochodowego od osób fizycznych, ale nie tylko. W niniejszym artykule zostaną omówione najbardziej istotne kwestie związane z opodatkowaniem osób fizycznych. Nowe regulacje zaczęły obowiązywać od 1 lipca 2022 r. W związku z interpretacją przepisów konstytucji dokonaną przez Trybunał Konstytucyjny, zmiany, które zostają wprowadzone w trakcie roku podatkowego nie mogą być niekorzystne dla podatników. Oznacza

---

\* Doktor, Wydział Ekonomiczno-Socjologiczny, Uniwersytet Łódzki.

to, że można wprowadzać zmiany w trakcie roku podatkowego, które sytuację podatników polepszają (ewentualnie jej nie zmieniają).

Jedną z najistotniejszych zmian jest wprowadzenie nowej skali podatkowej, a dokładniej obniżenie stawki podatkowej obowiązującej dla pierwszego progu podatkowego. Stawka ta została obniżona z 17 do 12%. W konsekwencji obniżki stawki podatkowej, zmienia się kwota pomniejszająca podatek obliczana w związku z kwotą wolną do opodatkowania i wynosi ona 3 600 PLN. Nie zmienia się jednak sama kwota wolna od podatku, która pozostaje na poziomie 30 000 PLN. Również kwota progu podatkowego, dla którego stosowana jest wyższa stawka podatku 32% nie zmieniła się i nadal kształtuje się na poziomie 120 000 PLN.

Nastąpiła co do zasady likwidacja ulgi dla tzw. klasy średniej. Kwestie związane z jej stosowaniem i obliczeniem budziły pewne kontrowersje. Na pierwszy rzut oka w związku z likwidacją tej ulgi wydawać się by mogło, że nie trzeba będzie się nimi zajmować. Jednak nie w każdym przypadku taki wniosek jest zasadny, o czym dalej w tym artykule zostanie wspomniane.

W związku z wprowadzeniem Polskiego Ładu w styczniu 2022 r. okazało się, że część podatników uzyskujących średnie dochody traci na jego wprowadzeniu (wskazaną właśnie grupę należy odróżnić od zamożniejszych podatników, których obciążenia podatkowe docelowo miały rosnąć), chociaż pierwotnie nie miały odczuwać negatywnie wprowadzonych zmian. W związku z tym faktem, Ministerstwo Finansów zdecydowało się wprowadzić mechanizm liczenia przez płatników zaliczki na podatek dochodowy od osób fizycznych dla tej kategorii osób na dwa sposoby: według reguł obowiązujących na 31 grudnia 2021 r. oraz według Polskiego Ładu. Następnie płatnik wybierał ten sposób obliczenia zaliczki, który jest bardziej korzystny dla podatnika. Początkowo takie zasady wprowadzono w formie rozporządzenia Ministra Finansów, a następnie w związku z wątpliwościami co do konstytucyjności takiego rozwiązania, przeniesiono te reguły do ustawy o podatku dochodowym od osób. Poprawa Polskiego Ładu likwiduje te regulacje. Oznacza to, że księgowi (działy płac) nie muszą już podwójnie obliczać zaliczki na podatek dochodowy, a jedynie stosują obecnie obowiązujące normy prawne. Generalnie większość podatników nie odczuje tej zmiany, bowiem nowe zasady (obniżenie stawki do 12%) jest dla nich korzystne lub neutralne. Wyjątkiem będą osoby uzyskujące dochody z umowy zlecenia. Mogą one zapłacić wyższą zaliczkę (niż w I połowie 2022 r.) w związku z faktem, iż przy miesięcznym rozliczaniu dochodów z umowy zlecenia i ustalaniu zaliczki na podatek dochodowy nie uwzględnia się kwoty wolnej od podatku. Jednakże osoby te uzyskają wyższy zwrot podatku za rok 2022, kiedy złożą swoją roczną deklarację w 2023 r.

Wprowadzono możliwość odliczenia składki zdrowotnej płaconej przez część przedsiębiorców. Podatnicy rozliczający podatek dochodowy według podstawowej stawki 19% (zwany kiedyś liniowym, ale po wprowadzeniu 4% daniny

solidarnościowej utracił ten charakter) mogą zaliczyć do kosztów lub odliczyć od dochodu zapłaconą składkę zdrowotną w wysokości 8 700 PLN. Natomiast podatnicy opłacający ryczałt ewidencjonowany mogą odliczyć od przychodów maksymalnie 50% zapłaconej składki na ubezpieczenie zdrowotne. Podatnicy rozliczający się za pomocą karty podatkowej mogą odliczyć od podatku 19% zapłaconej składki na ubezpieczenie zdrowotne.

Nowelizacja przepisów obowiązująca od 1 lipca 2022 r. pozwala przedsiębiorcom opodatkowanym ryczałtem ewidencjonowanym odliczać od przychodu połowę zapłaconych za siebie oraz osoby współpracujące składek zdrowotnych, płaconych za siebie oraz osoby współpracujące (najczęściej małżonek, rodzice bądź dzieci). Dzięki temu zapłacą niższy podatek (liczony od przychodu). Ulga weszła 1 lipca, ale odliczyć można też składki zdrowotne zapłacone w pierwszej połowie roku.

W efekcie obniżenia podstawowej stawki skali podatkowej z 17 do 12 % oraz zmian zasad odliczania składki zdrowotnej dla przedsiębiorców mogą zmienić się kalkulacje dotyczące opłacalności wyboru formy opodatkowania. Przedsiębiorcy już prowadzący działalność gospodarczą mieli czas do 21 lutego 2022 r. na określenie którą formę opodatkowania wybrać. W 2022 r. były trzy możliwe formy opodatkowania: podatek dochodowy według skali podatkowej, podatek dochodowy według podstawowej stawki 19%, ryczałt ewidencjonowany. Przedsiębiorcy decydując się na początku 2022 r. dokonywali obliczeń przy założeniu, że podstawowa stawka w skali podatkowej wynosi 17% i brak jest możliwości odliczania składki zdrowotnej. Zmiany poprawiające Polski Ład mogą wpłynąć na skutki kalkulacji dotyczącej wyboru najkorzystniejszej formy opodatkowania i sprawić, że forma, która była najkorzystniejsza z punktu widzenia przepisów obowiązujących na początku roku, po zmianach przestanie nią być. Dlatego ustawodawca zdecydował się wyjątkowo w 2022 r. na umożliwienie zmiany formy opodatkowania dla części przedsiębiorców. Podatnicy rozliczający się podstawową stawką 19% będą mogli przejść na rozliczenie według skali podatkowej. Taką zmianę mogą dokonać po zakończeniu roku, informując o tym w składanym zeznaniu podatkowym. Natomiast opłacający ryczałt ewidencjonowany, chcący płacić podatek według skali podatkowej, mają dwie możliwości – w połowie roku (składając oświadczenie do 22 sierpnia 2022 r.) lub po jego zakończeniu. Konsekwencją zmiany formy opodatkowania w trakcie 2022 roku będzie konieczność złożenia dwóch odrębnych zeznań. I półrocze będzie rozliczane ryczałtem od przychodów ewidencjonowanych. Natomiast II półrocze na zasadach ogólnych według skali podatkowej.

W związku ze zmianami wprowadzonymi od 1 lipca 2022 r. warto jeszcze wspomnieć o tzw. podatku hipotetycznym liczonym przez właściwego dla podatnika Naczelnika Urzędu Skarbowego. Dla niektórych podatników likwidacja ulgi dla tzw. klasy średniej i liczenie podatku według nowej 12% stawki może okazać

się niekorzystne w porównaniu do przepisów obowiązujących na początku 2022 r. Ponieważ zgodnie z orzecznictwem Trybunału Konstytucyjnego zmiany wprowadzone w trakcie roku podatkowego nie mogą być niekorzystne dla podatników, to organy podatkowe zobowiązane są do policzenia tzw. podatku hipotetycznego. Czyli jest to podatek, jaki podatnicy zapłaciliby na podstawie przepisów obowiązujących w I półroczu 2022 r. Jeżeli okaże się, że jest on korzystniejszy dla podatnika niż ten wykazany w zeznaniu za 2022 r. (czyli ustalony na podstawie przepisów obowiązujących od 1 lipca 2022 r.), to zostanie on zastosowany wobec podatnika.

To najważniejsze, ale nie jedyne zmiany, jakie przyniosła obowiązująca od 1 lipca 2022 r. nowelizacja już uchwalonego i stosowanego Polskiego Ładu.

---

### Koniunktura w sektorze przedsiębiorstw niefinansowych

**Artur Zimny\***

W 2. kw. 2022, podobnie jak w kwartale poprzedzającym, inwazja Rosji na Ukrainę była jednym z wiodących tematów, z którą wiązano już doświadczane lub dopiero przewidywane problemy polskiej gospodarki. Niezaprzeczalnym skutkiem jest oczywiście wysoka inflacja, napędzana przez blokowanie podaży i wzrastające ceny surowców energetycznych ze wschodu (przy czym podjęte w Polsce działania określone jako tarcza antyinflacyjna, a polegające m.in. na transferach środków publicznych do konsumentów, presję inflacyjną dodatkowo wzmacniają). Inflacja stała się więc jednym z symboli nadejścia kryzysu. Tymczasem wyniki polskich przedsiębiorstw niefinansowych za 2. kw. 2022 są zaskakujące, nadspodziewanie dobre. Przychody tych firm wzrosły w stosunku do 2. kw. 2021 o 36%, a wynik finansowy – o 33%. Oczywiście część tego wzrostu to „zasługa” dynamicznie rosnących cen, ale po urealnieniu tych wskaźników dynamiki o inflację nadal prezentują one imponujące wzrosty, wynoszące odpowiednio 19% i 17%. I o ile rekordowa dynamika przychodów odnotowana w 2. kw. 2021 (wzrost o 24,5% r/r) wynikała głównie z wyjątkowo niskiej, pandemicznej bazy (2. kw. 2020), to obecnie efekt niskiej bazy już nie występuje, a mimo to notuje się wysoki, realny wzrost przychodów. Potwierdza to nieco mniejsza, ale również dodatnia i wysoka dynamika produkcji sprzedanej przemysłu, dla której odnotowano w 2. kw. 2022 r. w porównaniu do analogicznego kwartału rok wcześniej

---

\* Doktor, Wydział Ekonomiczno-Socjologiczny, Uniwersytet Łódzki.



wzrost (realny, tj. w cenach stałych) o ok. 13%. Równie optymistycznie prezentują się rentowność polskich przedsiębiorstw niefinansowych; rentowność obrotu wzrosła w porównaniu z poprzednim kwartałem, w 2. kw. 2022 wyniosła ona 6,1% i była na podobnym poziomie, co w 2. kw. 2021, a było to wówczas pierwsze przekroczenie poziomu 6% od 10 lat, tj. od 2. kw. 2011. Rentowność liczona za ostatnie 4 kwartały wyniosła 5,6% i utrzymuje się wysoka już trzeci kwartał z rzędu, a poziomów takich nie notowano od co najmniej 15 lat, przy czym warto podkreślić, że wskaźniki rentowności nie są zniekształcane przez inflację. Z tymi wspaniałymi wynikami nie współgra natomiast tempo wzrostu PKB, które po uwzględnieniu sezonowości i inflacji w 2. kw. 2022 wyniosło 4,7%, czyli wyraźnie mniej niż w 4 kolejnych kwartałach poprzedzających (odnotowano wartości z przedziału od 6,1% do 11%). Jest to jednak nadal dynamika dodatnia (w przeciwieństwie do pandemicznego roku 2021), a przed pandemią, tj. w latach 2016–2019, analogiczny poziom (tj. prawie 5%) był typowy i dość stabilny.

Nadal korzystnie prezentują się wskaźniki obrazujące zarządzanie kapitałem obrotowym. Cykl obrotu zapasami za ostatnie 4 kwartały (do 2. kw. 2022 łącznie) wydłużył się nieco i wynosi ok. 36 dni, czyli więcej niż w latach przedpandemicznych, ale wskaźnik ten ma od lat tendencję wzrostową – cykl obrotu zapasami wydłużył się z 31 dni w roku 2011 do 35 dni w roku 2019, a problemy ze zbytem w roku 2021 spowodowały kolejne wydłużenie, do 37 dni, więc obecną długość cyklu, o 1 dzień krótszą, można uznać za umiarkowaną poprawę efektywności. Natomiast cykl inkasa należności kolejny raz uległ spadkowi – o ile do pandemii wynosił on 43–44 dni, to od dwóch lat następuje jego skracanie, w wyniku czego za ostatnie 4 kwartały (do 2. kw. 2022 łącznie) wyniósł on już tylko 39 dni. Zmniejszenie relacji należności do przychodów, interpretowane jako poprawa skuteczności egzekwowania tych należności, powinno się przełożyć na poprawę płynności, jednak najświeższe dane nie są w pełni zgodne z tym oczekiwaniem. O ile w roku 2021 wskaźniki płynności rzeczywiście były rekordowo wysokie (nienotowane od co najmniej 12 lat), to ostatnio uległy one obniżce. W 2. kw. 2022 wskaźnik płynności II stopnia (podwyższonej) wyniósł 105,6% (wobec szczytu 108% w kwartale poprzednim), a I stopnia ( $\approx$  gotówkowej) spadł do 40,9% (maksimum wynoszące 44,6% odnotowano w 3. kw. 2021). W pewnej mierze wynika to zapewne ze zmniejszenia procesu akumulowania gotówki i przeznaczania jej na inwestycje (znacznie ograniczone w okresie pandemii – dynamika nakładów inwestycyjnych była wówczas ujemna). Dane liczbowe pokazują jednak ostrożność i dość ograniczony optymizm w zakresie inwestowania. W 2. kw. 2022 nakłady inwestycyjne polskich przedsiębiorstw niefinansowych były o 19% wyższe od nakładów w analogicznym okresie rok wcześniej, ale po uwzględnieniu inflacji wzrost realny wynosi 4,5%, co nie jest wynikiem imponującym (choć i tak lepszym od wzrostu wynoszącego 0,6%, odnotowanego w kwartale poprzednim, po urealnieniu o inflację).

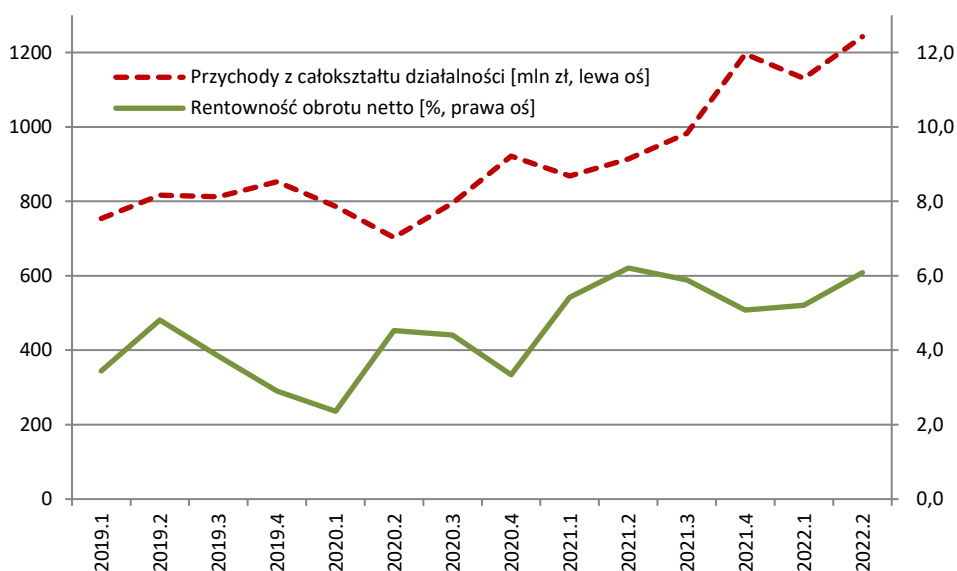
Wyniki poszczególnych branż są, jak zwykle, dość mocno zróżnicowane i nie można stwierdzić, by któraś z nich wykazywała we wszystkich obszarach działalności wyniki lepsze od pozostałych branż. Główna gałąź polskiej gospodarki, tj. przetwórstwo przemysłowe, w 2. kw. 2022 w stosunku do 2. kw. 2021 wykazała realnie (czyli po uwzględnieniu inflacji) dość wysoką dynamikę przychodów (21,5%) i wyniku finansowego (14%) oraz najwyższy spośród 5 głównych branż realny wzrost nakładów inwestycyjnych (16,4%), ale jednocześnie wykazała spadek płynności, przy praktycznie tym samym, co rok wcześniej, poziomie rentowności (5,7% za ostatnie 4 kwartały). Energetyka wyróżnia się najwyższym, bo wynoszącym niemal 47%, realnym wzrostem przychodów, co jednak może wynikać z wysokiej dynamiki cen samej energii i surowców energetycznych (wyższej od ogólnego wskaźnika inflacji, użytego tu jako deflatora). Rentowność branży za ostatnie 4 kwartały nieco się obniżyła (do 6,6%, czyli nadal jest nieco wyższa od innych branż, poza budownictwem), a wyraźniejszym spadkiem uległy wskaźniki płynności tej branży. Najgorzej energetyka wypada pod względem dynamiki inwestycji, bowiem jej nakłady w 2. kw. 2022 były realnie aż o 24% niższe od analogicznych nakładów rok wcześniej. Mimo to indeks WIG-Energia, grupujący giełdowe notowania spółek z tej branży, wzrósł w tym okresie o 13%. W budownictwie wzrost przychodów rok do roku był – w porównaniu z pozostałymi głównymi branżami – raczej umiarkowany (14,5%, realnie), natomiast wysoka była realna dynamika wyniku finansowego (+23,5% r/r) i poprawa rentowności (ROS za 4 kwartały wzrósł o 1,8 punktu procentowego, do poziomu 7,4%, najwyższego spośród 5 głównych branż). Obniżyły się natomiast wskaźniki płynności tej branży, a nakłady inwestycyjne były realnie o 11,5% niższe niż rok wcześniej. Atrakcyjność branży dla inwestorów giełdowych również musiała być niższa, skoro dla indeksów WIG-Budownictwo i WIG-Nieruchomości odnotowano w ciągu roku spadki o, odpowiednio, 13% i 15%. Poprawą niemal wszystkich wskaźników wyróżnia się branża transportowa, która wykazała co prawda mniejszy niż przemysł przetwórczy czy energetyka wzrost przychodów (w 2. kw. 2022 były one realnie o 16% wyższe niż rok wcześniej), ale za to najwyższy spośród 5 głównych branż realny wzrost wyniku finansowego (o 26%) i poprawę rentowności obrotu (ROS za ostatnie 4 kwartały wyniósł 4,3%). Branża transportowa, jako jedyna, wykazała też wzrost wskaźników płynności. Słabo wypada ona natomiast w dziedzinie inwestycji, gdzie realnie odnotowano nieduży (niecały 1%), ale jednak spadek w porównaniu z analogicznym kwartałem rok wcześniej. Wyniki branży handlowej w 2. kw. 2022 na tle pozostałych głównych branż prezentują się słabo. Realna dynamika przychodów i wyniku finansowego w stosunku do analogicznego kwartału rok wcześniej była co prawda dodatnia, ale najniższa spośród tych branż (odpowiednio, 13% i 7%). Rentowność obrotu praktycznie się nie zmieniła i pozostaje niska (3,6%), a płynność obniżyła się najbardziej spośród branż. Pozytywnym aspektem są natomiast nakłady inwestycyjne, które wzrosły

realnie o 12% – była to dynamika niższa niż w przetwórstwie przemysłowym, ale wyższa niż w pozostałych 3 branżach, które wykazały wskaźniki ujemne.

Biorąc pod uwagę warunki, w jakich przyszło działać polskim przedsiębiorstwom, należałoby oczekiwać pogorszenia się ich wyników. Wysoka inflacja ogranicza realny popyt na dobra i usługi, a także przekłada się na presję na podwyżki płac ze strony pracowników. Oprócz rosnących kosztów wynagrodzeń wysokie są też koszty energii i paliw, które z kolei wzmacniają presję inflacyjną – i spirala płacowo-cenowa jest ciągle w ruchu. W ramach walki z inflacją w krótkim czasie drastycznie podniesiono stopy procentowe (w ciągu roku, tj. od września 2021 do września 2022, stopę referencyjną NBP podniesiono z 0,1% do 6,75%, czyli do poziomu nienotowanego od grudnia 2002), co dla przedsiębiorstw oznacza nagły, znaczny wzrost kosztów kredytowania, czyli ograniczenie możliwości zwiększania skali działalności przez wykorzystanie dźwigni finansowej. Obawy o przyszłość polskiej gospodarki odzwierciedlają wartości wskaźników WWUK, WOKKG i PMI, którymi „mierzy się” optymizm/pesymizm oczekiwań co do przyszłej sytuacji ekonomicznej. Pierwszy z nich (Wyprzedzający wskaźnik ufności konsumenckiej, o potencjalnej rozpiętości od +100 do –100) w październiku 2022 spadł do poziomu –35,7, czyli najniższego od czasu wybuchu pandemii COVID-19. Kolejny (Wskaźnik ogólnego klimatu koniunktury) również już od pół roku wykazuje spadki dla różnych branż; szczególnie niskie wartości, tj. –22 i –21, odnotowano w październiku 2022 dla budownictwa i przetwórstwa przemysłowego. Trzeci (Purchasing Managers' Index) ma trend spadkowy od początku 2022 r., w październiku jego wartość wyniosła 42,0 (wartość niższa od 50 oznacza, że w ocenie perspektyw gospodarczych opinie pesymistyczne przeważają nad optymistycznymi). W kontrze do tych kasandrycznych prognoz stoją jednak twarde liczby, choć danych za najbardziej aktualne okresy zawsze jest niewiele, bowiem proces ich gromadzenia, obróbki i publikacji wymaga czasu. Najnowsze dane wskazują, że dynamika produkcji sprzedanej przemysłu jest ciągle wysoka – w lipcu, sierpniu i wrześniu 2022 r. była ona wyższa, odpowiednio, o 7%, 11% i 10%, od produkcji w analogicznych miesiącach rok wcześniej, i to w cenach stałych, co oznacza, że są to wzrosty realne, oczyszczone z wpływu inflacji. Wynika stąd, że sprzedaż ciągle rośnie, i to w tempie bardzo niewiele ustępującym dynamice z ostatnich 12 miesięcy. Rośnie także, mimo wysokiego kosztu finansowania, wartość kredytów udzielona przedsiębiorstwom – w sierpniu 2022 była ona o 18,5% wyższa niż w sierpniu 2021 (oznacza to także realny wzrost wartości, skoro średni poziom cen w tym okresie wzrósł o 16,1%). Także na giełdzie, traktowanej jak barometr koniunktury, widać optymizm inwestorów – po trwających przez rok spadkach indeksu WIG, w połowie października zaczął się jego wzrost, który – jak się okazuje – nie jest jedynie kolejną korektą w ramach trendu spadkowego; notowania przebiły linię oporu tego trendu i dynamicznie rosną, pokonując kolejne istotne poziomy wyznaczone przez niedawne lokalne

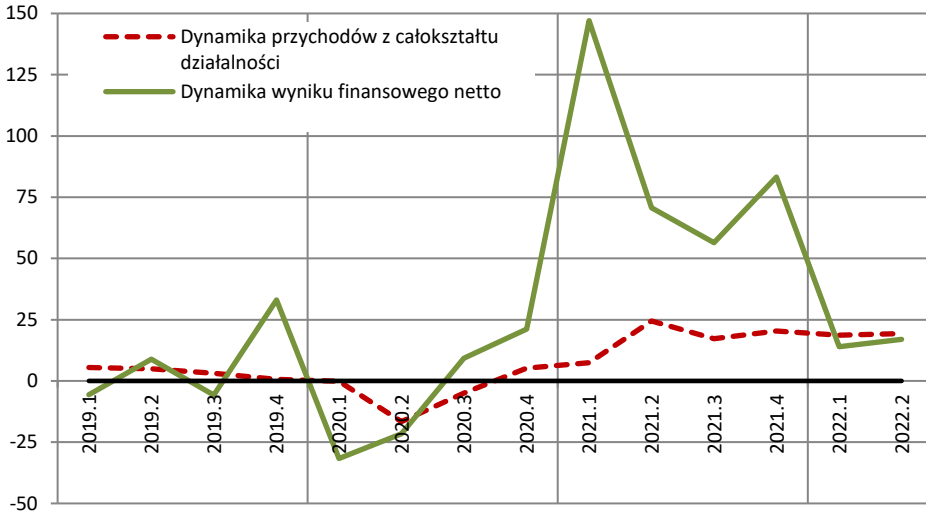
## DODATEK KWARTALNY

maksima. W ciągu ostatniego miesiąca (do połowy listopada) WIG wzrósł o ok. 18%. Motorami tego wzrostu są w dużej mierze spółki górnicze (WIG-Górnictwo wzrósł w miesiąc o 33%), branża odzieżowa (WIG-Odzież wzrósł o 20%), gamingowa (wzrost WIG-gry wyniósł 16%), a także branże paliwowa, motoryzacyjna i chemiczna (odpowiadające im indeksy wzrosły odpowiednio o 15%, 13% i 11%). Niezaprzeczalnym atutem polskiej gospodarki jest bardzo wysoki poziom zatrudnienia – stopa bezrobocia rejestrowanego od lat utrzymuje się na kilkuprocentowym poziomie, a w ciągu ostatniego roku (od września 2021 do września 2022) spadła z 6,1% do 5,1%. Paradoksalnie, jednym z czynników podtrzymujących dobre wskaźniki koniunktury, mimo negatywnych prognoz, może być właśnie wojna na Ukrainie, pochodną której była duża fala uchodźców, która z jednej strony generuje istotny popyt na dobra i usługi, a z drugiej zwiększa podaż pracy, tak ostatnio brakującej na rodzimym rynku. Tak oczekiwany przez oba narody pomyślny dla Ukrainy finał konfliktu otworzyłby nowe możliwości zacieśniania współpracy i rozwijania projektów biznesowych, ten scenariusz jednak zależy od wielu czynników, z których nie na wszystkie, niestety, mamy wpływ.



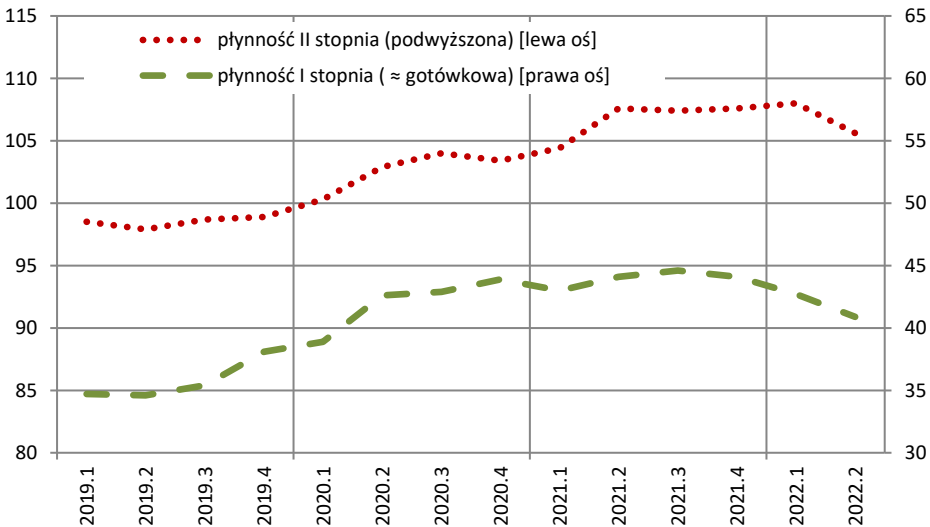
Wykres 1. Kwartalne wyniki przedsiębiorstw niefinansowych [mln zł], ceny bieżące

Źródło: dane GUS.



Wykres 2. Dynamika wyników kwartalnych [zmiana w % w stosunku do analogicznego kwartału roku poprzedniego], urealniona o wskaźnik CPI

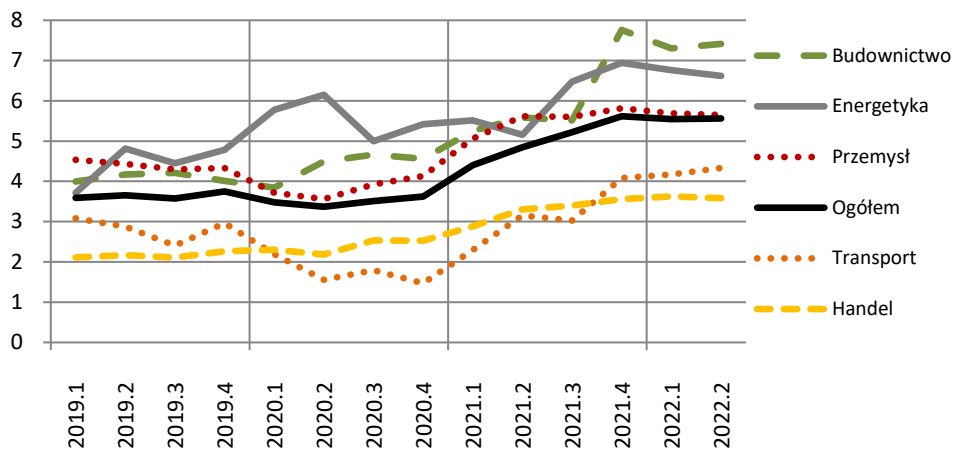
Źródło: dane GUS.



Wykres 3. Wskaźniki płynności przedsiębiorstw niefinansowych [w %]

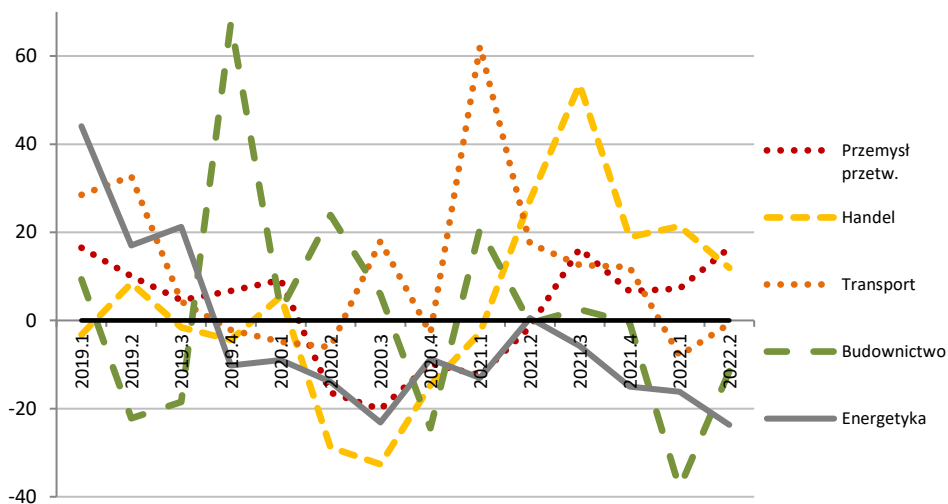
Źródło: dane GUS.

# DODATEK KWARTALNY



Wykres 4. Rentowność obrotu netto za ostatnie 4 kwartały [w %]

Źródło: dane GUS.



Wykres 5. Dynamika realna nakładów inwestycyjnych [zmiana w % w stos. do analogicznego kwartału roku poprzedniego, urealniona o wskaźnik CPI]

Źródło: dane GUS.



Wykres 6. WIG w okresie 11.2021–12.2022

Źródło: dane stooq.pl.

## Sytuacja gospodarcza w Polsce po III kwartale 2022 roku

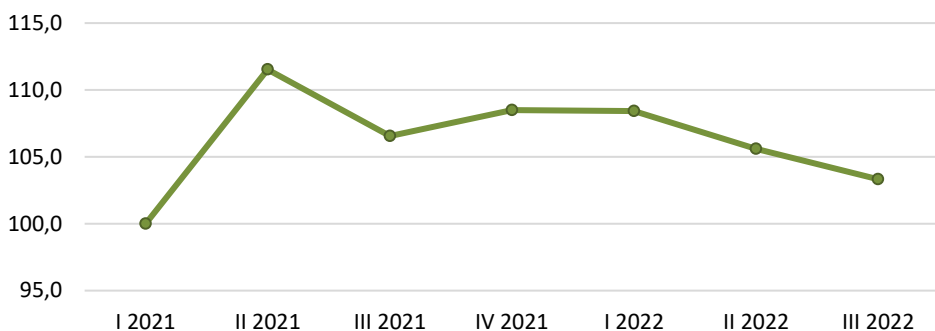
Zuzanna Pakuła, Patryk Krykwiński\*

### Wzrost gospodarczy

Według wstępnych szacunków Głównego Urzędu Statystycznego w III kwartale 2022 roku produkt krajowy brutto niewyrównany sezonowo wzrósł o 3,6% rok do roku wobec wzrostu o 6,5% w III kwartale 2021 roku, co oznacza jednocześnie spadek o 2,2% w stosunku do poprzedniego okresu. Natomiast PKB wyrównany sezonowo, w porównaniu z poprzedzającym kwartałem bieżącego roku wykazał realny wzrost o 1% oraz 4,5% w stosunku do analogicznego okresu w roku ubiegłym.

\* Studenckie Koło Naukowe Analiz i Prognozowania Gospodarczego 4FUTURE, Wydział Ekonomiczno-Socjologiczny, Uniwersytet Łódzki.

## DODATEK KWARTALNY



Wykres 1. Dynamika zmian PKB niewyrównanego sezonowo w ujęciu kwartalnym r/r (odpowiedni kwartał roku poprzedniego równa się 100)

Źródło: opracowanie własne na podstawie danych GUS.

Na wspomniany wzrost PKB wpłynął przede wszystkim wzrost popytu krajowego, który wyniósł 3,1%. Dla porównania, w kwartale poprzedzającym wzrost ten wyniósł 6,9%. Na popyt krajowy złożyły się wzrost akumulacji brutto o 11,4% (w II kwartale wzrost o 15,1%) oraz wzrost spożycia ogółem, który wyniósł 0,7% (w II kwartale wzrost o 4,8%). Spożycie w sektorze gospodarstw domowych wzrosło o 0,9% (przy wzroście o 6,4% w II kwartale br.).

Patrząc na poszczególne sektory składające się na wartość dodaną brutto w gospodarce narodowej w III kwartale 2022 roku możemy stwierdzić, że najwyższy wzrost osiągnięto w działalności finansowej i ubezpieczeniowej oraz transporcie (odpowiednio 12,2% oraz 9,7%). Wraz z przyhamowaniem wzrostu spożycia w sektorze gospodarstw domowych odnotowaliśmy niewielki wzrost w handlu (zaledwie 0,1%). Warto zatem zauważyć, że III kwartał wskazał na pogorszenie koniunktury w ujęciu ogólnym, na co składa się w dużej mierze nagły spadek w konsumpcji oraz nieustępująca wysoka inflacja, które zniechęca do większych wydatków i inwestycji.

### Inwestycje

W III kwartale 2022 r. nakłady brutto na środki trwałe wzrosły o 2% (wobec wzrostu w kwartale poprzedzającym omawiany przez nas okres o 6,6%). Biorąc pod uwagę brak znaczącej poprawy warunków dla inwestycji w III kwartale 2023 roku nie spodziewaliśmy się dużo większego wzrostu. Za taki stan rzeczy odpowiada w największym stopniu spadek inwestycji w budownictwie oraz sektorze energetycznym. W interesującym nas okresie nie zaobserwowaliśmy poprawy warunków dla inwestycji w wymienionych sektorach.



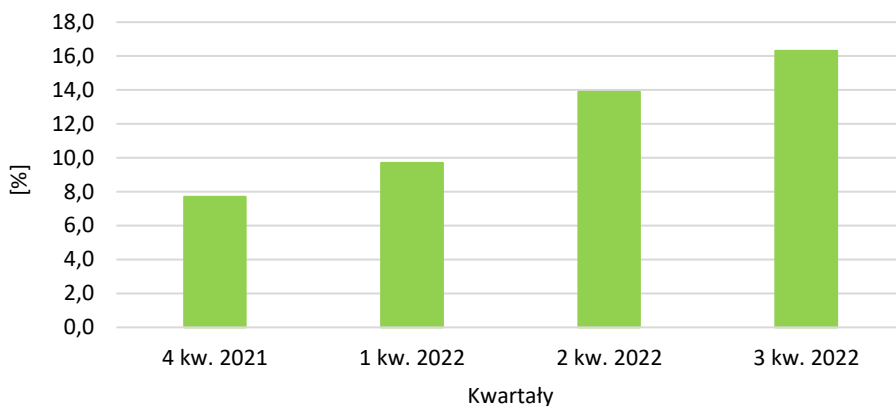
### Inflacja

III kwartał roku 2022 przyniósł kolejny już wzrost wskaźnika cen towarów i usług konsumpcyjnych, a każdy z kolejno następujących po sobie miesięcy charakteryzował się wyższą jego wartością od poprzedniego. Najwyższa wartość wskaźnika w tym okresie przypisywana jest do miesiąca września i wynosiła 17,2% rok do roku, zaś skumulowana wartość za III kwartał to 16,3%.

Najważniejszą składową koszyka inflacyjnego pozostała kategoria „użytkowanie mieszkania i nośniki energii”, osiągnąwszy wynik na rekordowym poziomie, tj. 27,5% r/r, co zgodnie z teorią głoszącą wpływ wzajemnych powiązań w globalnych łańcuchach dostaw na rozwój inflacji, przyczyniło się znacznie do wzrostu cen w pozostałych częściach składowych koszyka inflacyjnego. W związku z powyższym, w ubiegłym kwartale można było zaobserwować znaczący wzrost cen żywności, który, osiągnąwszy poziom niemal 17,5%, był dużym szokiem dla ogromnej części konsumentów przekładających ceny związane z wyżywieniem rodziny nad inne, ze względu na fakt, że ta kategoria stanowi większość ich koszyka zakupowego.

Prześledziwszy dokładnie sytuację mającą miejsce w ostatnich miesiącach na rynkach międzynarodowych, włącznie z międzynarodowym sektorem finansowym i skutkami wojny rosyjsko-ukraińskiej, wzrost cen w powiązaniu ze stosunkowo stabilną sytuacją na rynku pracy nie powinien dziwić. Państwa grupy OPEC naturalnie wykorzystują niepewność panującą na rynkach i podejmują decyzje o ograniczeniu produkcji ropy, co, zmniejszając zdecydowanie podaż surowca i tak już ograniczoną na skutek sankcji nałożonych na podobne produkty rosyjskiej gospodarki przez większość świata zachodniego, przyczynia się do znaczącego wzrostu cen transportu – w III kwartale o 21,8% r/r. Warto zwrócić uwagę na fakt, że zmiana ta nie zachodzi w ogóle w stosunku do kwartału ubiegłego według danych GUS.

W tym miejscu warto również przytoczyć decyzje podejmowane przez Radę Polityki Pieniężnej odpowiedzialnej za sprowadzenie wzrostu cen towarów i usług konsumpcyjnych do celu inflacyjnego, który jest o kilkanaście punktów procentowych niższy niż obecny poziom inflacji w Polsce i wynosi 2,5%. Główna stopa referencyjna została z początkiem lipca podniesiona do 6,5%, natomiast we wrześniu podniesiono ją dodatkowo o 25pb. Wielu ekonomistów spodziewa się dalszego podnoszenia stopy referencyjnej w celu ograniczenia inflacji, lecz działania RPP w ostatnich miesiącach są sprzeczne z ich oczekiwaniami.



Wykres 1. Wskaźnik cen towarów i usług konsumpcyjnych w ujęciu kwartalnym r/r  
Źródło: opracowanie własne na podstawie danych GUS.

### Bezrobocie

Stopa bezrobocia rejestrowanego w Polsce w III kwartale 2022 roku utrzymała się na poziomie 5,1% r/r i (na koniec kwartału) i była najniższa w roku. Poziom bezrobocia w Polsce od dawna jest stabilny i nie zachodzą na tym tle większe wahania mimo zmiennej koniunktury gospodarczej czy zawirowań na arenie międzynarodowej, w łańcuchach dostaw, czy wreszcie pomimo obostrzeń mających przeciwdziałać rozwojowi pandemii koronawirusa.

Według danych Eurostatu bezrobocie w Polsce było na drugim najniższym poziomie w Unii Europejskiej (tuż po Czechach) i nieustająco spadało, mimo – co warto zaznaczyć – masowej imigracji ludności zza wschodniej granicy, która znajdowała zatrudnienie w Polsce. Ekonomiści są zdania, że przedsiębiorcy polscy wolą ograniczać rosnące koszty prowadzenia działalności gospodarczej w sposób inny niż redukowanie pracowników. Przedsiębiorcy szukają ograniczenia wydatków przez oszczędzanie energii, obniżanie lub też niepodwyższanie pensji, która realnie wraz ze wzrostem inflacji jest warta coraz mniej czy stosowanie optymalizacji podatkowej.

Wartą odnotowania jest również różnica w poziomie zatrudnienia w poszczególnych gałęziach gospodarki. Zgodnie z danymi BAEL większe spadki zatrudnienia następowały w III kwartale zarówno w przetwórstwie przemysłowym, jak i rolnictwie. Wzrost zatrudnienia odnotowany został natomiast w handlu hurtowym i detalicznym, co wciąż może pozostawać w związku z rosnącym, odroczone popytem konsumpcyjnym.

W obecnym momencie należy również wspomnieć o zależności opisanej dobrze na przykładzie krzywej Phillipsa. Według tego modelu czym wyższa inflacja,

tym niższe bezrobocie i analogicznie ma się rzecz w drugą stronę. W pewien sposób możemy zaobserwować tę zależność w poszczególnych krajach europejskich – w Polsce gdzie inflacja jest na stosunkowo wysokim poziomie, bezrobocie utrzymuje się na jednym z najniższych w Europie, natomiast w państwach zachodnich inflacja jest mniejsza, choć poziom bezrobocia wzrasta.

### Sytuacja na giełdzie papierów wartościowych

Patrząc na giełdę nie możemy stwierdzić poprawy, jeśli chodzi o atmosferę wśród inwestorów. Dotyczy to zarówno rynku akcji, jak i obligacji. Na niekorzystną sytuację składa się kilka elementów. Przede wszystkim niepewność, którą widać w bardzo częstych zmianach stóp procentowych. Tę niepewność zwiększają zapowiedzi rządzących o nagłych zmianach w opodatkowaniu, np. propozycja podatku od nadmiarowego zysku. Oczywiście umniejszone w ten sposób zyski przełożyłyby się na zmniejszone zwroty dla inwestorów, perspektywa czego tylko zniechęca do podejmowania inwestycji przez zarówno lokalnych jak i globalnych graczy. Elementem, który mógłby pomóc jest skuteczna walka z inflacją, przekładająca się na obniżkę stóp procentowych. Póki co jednak, w III kwartale nie zaobserwowaliśmy w tym zakresie poprawy. Spostrzeżenie to tyczy się również nadchodzących danych za ostatni kwartał roku 2022.

### Podsumowanie

Podsumowując, w III kwartale 2022 roku zaobserwowaliśmy wyhamowanie wzrostu gospodarki oraz pogorszenie się warunków na dokonywanie inwestycji. Na obecny stan rzeczy składa się przede wszystkim ciągle wysoka inflacja oraz niepewny klimat polityczny. Oba czynniki skutkują zniechęceniem inwestorów, co z kolei przekłada się na wiele innych obszarów. Spadek zainteresowania inwestycjami w obligacje powoduje zwiększenie rentowności obligacji 10-letnich. Polityka rządzących jest dość niekonsekwentna, bo jednocześnie w tym samym okresie stopy procentowe nie są podnoszone w sposób wystarczający. W związku z brakiem jednoznacznych działań mających na celu obniżenie inflacji, spada nie tylko liczba inwestycji, ale również konsumpcja. Wyżej wymienione zjawiska przyczyniły się do niekorzystnej sytuacji gospodarczej i póki co, nie zanoszą się na znaczącą poprawę w najbliższym czasie. Jako studenckie koło naukowe prognozujemy utrzymanie się wysokiej inflacji jeszcze do połowy I kwartału 2023 roku. Jej poziom będzie istotny w oczekiwaniu na okres o polepszonej koniunkturze.

Spoglądając na rynek pracy, warto zauważyć, że zarówno bezrobocie jak i inflacja są od siebie ściśle uzależnione w gospodarkach kapitalistycznych opartych na wolnorynkowych zasadach funkcjonowania i w związku z tym zależności między nimi powinny być omawiane na podstawie porównania. Bezrobocie w Polsce utrzymuje się stale na niskim i stabilnym poziomie, ograniczając swój główny

zasięg do poziomu bezrobocia naturalnego, które jest normalnym stanem rzeczy umożliwiającym między innymi rotację zatrudnienia. Inflacja z drugiej strony od dłuższego czasu rośnie i bije kolejne rekordy, zmniejszając siłę nabywczą polskiego złotego. Proponowaną alternatywą dla ograniczenia dynamiki rozwoju CPI w Polsce jest zwiększenie poziomu bezrobocia, na co jednak nie ma zgody zarówno w społeczeństwie, jak i w przedsiębiorstwach, które wolą ograniczać zwiększone koszty swojej działalności w mniej drastyczny sposób. Biorąc pod uwagę powyższe wnioski, nasze koło nie spodziewa się znaczących zmian, jeśli chodzi o odsetek bezrobotnych na rynku pracy, a także poważnych zmian w jego strukturze.