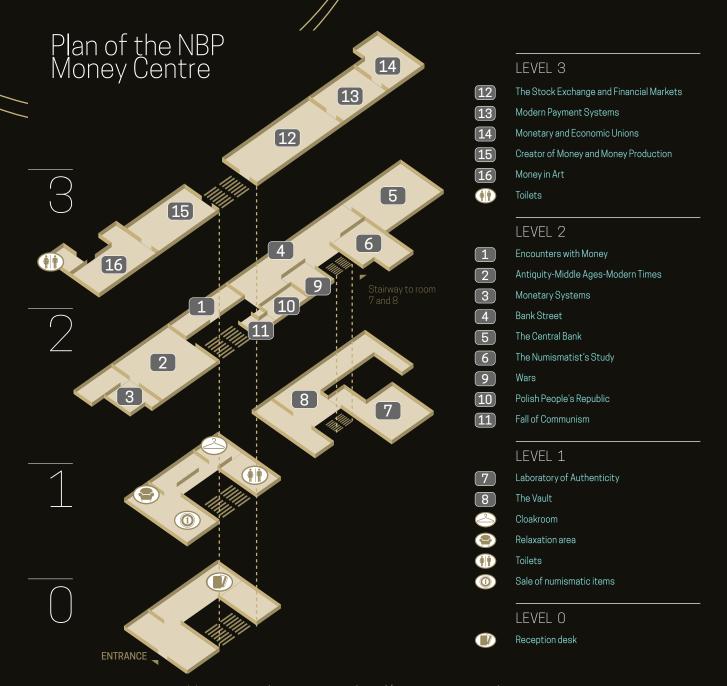
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# Bankoteka

HISTORY • ECONOMY • EDUCATION





#### Dear readers,

When we were working on this edition of the "Bankoteka" magazine, we didn't know what the coming Christmas season would look like. However, this special time is deeply rooted in the Polish national tradition and we will certainly be singing Christmas carols in our homes this year as well.

We refer to the tradition of caroling on the front page of our magazine. On the subsequent pages we present a selection of NBP collector coins with the images of Polish poets whose works reflected the attachment of Polish people to Christmas carols. Let their poems bring us some relief from the difficulties that we are currently facing in our everyday life.

In the "Education" section we return – after a long break – to the "Stock Exchange and Financial Markets" room. In the coming year, the NBP Money Centre is planning to update the contents of this room relating to the stock exchange and modern finance.

In the next article presented in this section we describe the evacuation of Bank Polski. However, this time we are not talking about the widely known events of September 1939, but about an evacuation carried out in March 1831, when the November Uprising was taking place in the Kingdom of Poland. The uprising broke out 190 years ago, on the night from 29 to 30 November 1830, and it ended in October 1831. Why was the city of Kielce selected as the destination for the resources of Bank Polski which were previously kept in Warsaw? The answer to that question is presented in the article entitled "The role of Kielce in the history of Polish central banking".

Once again in our magazine we take a look inside the "Antiquity-Middle Ages-Modernity" room, where we continue to explore the history of the role of cowrie shells' as... yes, global money!

In the section entitled "From the Calendar of the NBP Money Centre" we report with satisfaction on the success of the 2019 outdoor exhibition "History of the Złoty". The exhibition made its way to the final stage of the "Historical Event of the Year 2019" competition!

We also write about the screenings of the movie "Wiktoria 1920", which were organized at the NBP Money Centre. The film was realized in the 360-degree VR technology and commemorates the 100th anniversary of the Battle of Warsaw in a very attractive way, just like the [vertical!] banknote "Independence", described in the 23rd edition of "Bankoteka", which can be viewed in the "Creator of Money and Money Production" room.

On our website at www.cpnbp.pl we have posted new educational materials that are designed to aid users in their efforts to learn about topics related to money. We hope that they will prove useful for both the teachers and the students. One of these materials is a lesson plan entitled "The Laboratory of authenticity". It refers to the presentation included in the NBP Money Centre room of the same name. Meanwhile, the second educational material is a comic book entitled "On the trail of the Polish złoty".

Enjoy reading our magazine as well as the online contents!

The editorial team of "Bankoteka"



Poets from the NBP collector coins join the procession of carolers pp. 5-9



# Poets from the NBP collector coins join the procession of carolers

For the upcoming Christmas holidays, we would like to encourage you to sing carols with your family at home. In our exploration of Christmas carols we will be guided by NBP collector coins with portraits of poets who described in their works the charm of Polish Christmas and the associated customs. For new hope...

On the cover page of "Bankoteka" our native tradition of celebrating Christmas is presented through the collector coin entitled "Carolers". Here we have a group of carolers with a horned beast known as a "turoń" in the front. The carolers are walking on a snowy winter night, carrying a star (which is executed on the coin using zirconium). We also have a Kraków-style nativity scene and Christmas wishes of prosperity to our families. They are singing carols on their way to the traditional Midnight Christmas Mass ("pasterka") at the church visible in the background.

"Carolers"
20 złoty, 2001, Ag 925, oxidized, with a zirconium inset

This is how traditional Polish carolers were presented by designer Robert Kotowicz on the reverse side of the 20 złoty coin issued by Narodowy Bank Polski in 2001.

On the cover of the Christmas edition of "Bankoteka" the procession of carolers is joined by Polish poets who were featured on NBP commemorative coins and who referred in their works to the Polish Christmas traditions. And so, in the front, the procession is joined by Adam Mickiewicz, who was portrayed on an NBP gold commemorative

coin in 1998 on the  $200^{th}$  anniversary of his birth. The graphic layout of the coin was prepared by the outstanding coin designer Ewa Tyc-Karpińsk

#### **Adam Mickiewicz**

During a lecture on Slavic literature in Paris he said: I'm not sure whether any other country can boast of a collection as great as the one that Poland has. I'm referring to the collection of canticles, which constitute the first nucleus of Polish national poetry.

#### From Part III of "Forefathers' Eve":

When I flew with the star of hope / Shining a light over Judea / The Angels were singing the Christmas hymn / The wise men did not see us / and the Kings did not hear.

Only the shepherds saw us / And ran to Bethlehem: / The eternal wisdom was first welcomed / And eternal authority was recognized By the poor, the lowly, and the meek.

Source: https://pl.wikiguote.org/wiki/Adam\_Mickiewicz



"200th anniversary of the birth of Adam Mickiewicz" (1798–1855) 200 złoty, 1998, Au 900 Above, we see the bespectacled Father Jan Twardowski, an outstanding representative of contemporary religious poetry. Thanks to the work of designer Dominika Karpińska-Kopiec, Father Twardowski was depicted on an NBP commemorative coin issued on the 95th anniversary of his birth.



"95" anniversary of the birth of Father Jan Twardowski" (1915–2006) 10 złoty, 2010, Ag 925

#### Rev. Jan Twardowski

#### Why does Christmas exist?

Why does Christmas exist?
Why do we stare at a star in the sky?
Why do we sing the carols?
In order to learn how to love our Lord Jesus Christ.
In order to shake each other's hand.
In order to smile at each other.
In order to forgive each other.

Source: http://www.swieta.eu/boze-narodzenie/wiersze/

Below, there is Juliusz Słowacki, looking at the group of carolers. On the occasion of the  $150^{\rm th}$  anniversary of the poet's death, which was in 1999, Narodowy Bank Polski issued a coin with his image (designed by Ewa Tyc-Karpińska).

Słowacki's body of work also includes his own Christmas carols, in which he referred to the classics of the genre. These poems were probably a reminder of his happy childhood. "Oh, if I could just hear my grandpa once again, singing simple carols on Christmas Day, along with the servants at the house, I believe I could go back to the childlike faith of my past, because right now I feel around me some strange sort of emptiness and loneliness," Słowacki wrote on 5 February 1835 in Geneva, in a letter sent to his mother.

#### Juliusz Słowacki

#### **Bright Christmas Carol**

Christ Our Lord is born New life bestowed upon the world... And the souls

Over the hay, over the manger There are angels flying They are laughing

The sparrows have arrived To Our Lady of Salvation... They are singing

> Chains of swans have come, With their silver down feathers They are offering

She took some down, And she made a pillow For the Infant Jesus... Then she laid Him down And covered Him with hay In the manger.

The "Bright Christmas Carol" comes from Słowacki's drama "The Golden Skull".

Source: https://opoka.org.pl/ biblioteka/l/IL/zapomniana\_koleda.html



"150th anniversary of the death of Juliusz Słowacki (1809–1849)"  $200\,z$ łoty, 1999, Au $900\,$ 

On the back cover of the magazine, among an abundance of snowflakes, we have other Polish poets joining the procession of carolers. The first of them, starting from the top left corner, is Cyprian Kamil Norwid. This representative of late Romantic period poetry was depicted on an NBP commemorative coin designed by Ewa Tyc-Karpińska on the 130th anniversary of his death.

#### **Cyprian Kamil Norwid**

#### The Christmas wafer

In my country there is a custom, that on Christmas Eve
Once the first evening star appears in the sky
Families gather by a table and break biblical bread
In this bread, they are expressing their most tender feelings.
This fragile white wafer, a thin piece of wheat
Is a symbol of great things, a symbol of peace and heaven.
And just like centuries ago, God descends on
the night-shrouded Earth
Let us be brethren again, let us forgive all harm, if needs be.
Let us share this wafer, the bread of peace and heaven.

Source: https://poezja.org/wz/Norwid\_Cyprian\_Kamil/



On the right, we see Mikołaj Rej of Nagłowice, who is looking towards the carolers. The image of the poet comes from an NBP collector coin designed by Ewa Olszewska-Borys and issued on the occasion of the 500th anniversary of Rej's birth.



#### Mikołaj Rej

In the "Second Christmas Day Sermon", which carries the subtitle

"On the fear that the devil felt, and the comfort That mankind derived from the Birth of the Lord"

#### the author preaches:

[...] oh, what joy and what comfort came upon the whole world from the birth and from the coming of our illustrious guest, and what joy filled all of heavens, and all of the Earth, which during that time the courtiers and the knights of the heavenly court,

expressed openly, singing in the open air, and giving glory to the Lord, for He has so mercifully decided to fulfil His promises, and that He has already sent his child [...]

Source: http://www.docelu.biblia.info.pl/ksiazki/rei.pdf

The electronic edition of Mikołaj Rej's "Postylla" (Postil) was prepared in Kraków in 2012 thanks to the efforts of the editorial team at the "Do Celu" magazine. The compilation was based on the so-called "Cieszyn edition" of Mikołaj Rej's sermons, published in 1883.

On the right side, at the top, we see the winner of the 1980 Nobel Prize in literature, Czesław Miłosz. On the  $100^{\rm th}$  anniversary of the artist's birth his image was depicted on an NBP commemorative coin designed by Robert Kotowicz.



"Czesław Miłosz (1911–2004)" 200 złoty, 2011, Au 900

#### Czesław Miłosz

#### A Christmas Prayer

Oh, Mary pure, bless the woman, who doesn't believe in mercy.
Let your bright weary hand
Sooth all her sorrows.
May she cry more lightly under your embrace.

Send her a green magic tree for the Christmas Eve table, Let her hear the hum of the bees when she touches it, Let abundant beautiful apples fall to the ground. And instead of candles, give her the star of the frosty fields.

Bring to her a parade of white mountains, And let them shine into her window. Let the astrologers of Chaldea and Ur, Heal the memories of the bad years. And let the deceased poets pluck the strings, And sing a carol for the lonely woman.

Source: https://poezja.org/wz/Mi%C5%82osz\_Czes%C5%82aw/28563/Modlitwa\_wigilijna

In the second row, from the left, we see Jan Kochanowski. He came straight from Czarnolas in order to add a traditional Old Polish carol to this exceptional collection. Kochanowski – one of the most outstanding Polish artists of the Renaissance period, and the court poet of King Stephen Bathory – was portrayed by Stanisława Wątróbska on a silver coin issued by NBP on the occasion of the 450th anniversary of his birth.

#### Jan Kochanowski

#### Christmas Carol

Yours be the glory, Lord of the world, Because you have let us live to see another year. Let us renew ourselves, And let us live in innocence, having abandoned our sins.

Grant us peace and holy harmony Let the pagan nations fear us, And do not leave our side, Oh Lord, But help us and support us.

Bless the Earth with your generosity, To provide us with an abundance of food, Keep us safe from hunger and bad air, Bestow upon us all the blessings of Your mercy!

Source: https://www.staropolska.pl/renesans/ jan\_kochanowski/fragmenta.html



"Jan Kochanowski" (1530-1584) 100 złoty, 1980, Ag 625 The next poet in our procession is wearing an opera hat and is riding in a magical carriage! It's Konstanty Ildefons Gałczyński, who came straight from the Little Theatre of The Green Goose to sing carols with us. The poet's image, placed on an NBP commemorative coin issued on the  $100^{\rm th}$  anniversary of his birth, was designed by Ewa Tyc-Karpińska.

This silver and gold parade of poets is concluded by a representative of the Generation of Columbuses – Krzysztof Kamil Baczyński. He was one of the greatest poets of the German-occupation era. Unfortunately, his career was cut short by his heroic death in combat. Baczyński was depicted on an NBP collector coin commemorating the 65<sup>th</sup> anniversary of the Warsaw Uprising designed by Roussanka Nowakowska.

#### Konstanty Ildefons Gałczyński

#### Before we light up the Christmas tree

Apparently, there is a street somewhere (but how to get there? which way?)
The street of betrayed childhood,
The street of the Great Carol.
[...]

It's quiet. The Christmas tree is lit up.
And the cherub is flying on the top.
The Geranium flowers in the windows
Are illuminated with the gold glow of the candles,
And in the corner, I can hear my brother
Playing a carol on the ocarina:

SLEEP SWEETLY, LITTLE JESUS, MY LITTLE PEARL, SLEEP SWEETLY, LITTLE JESUS, MY PRECIOUS BABY.

Source: https://malowane-wierszem.blogspot.com/2011/12/przed-zapaleniem-choinki-konstanty.html



 $^*100$ th anniversary of the birth of Konstanty Ildefons Gałczyński (1905–1953) $^*$ 200 złoty, 2005, Au 900

#### Krzysztof Kamil Baczyński

#### Christmas Carol

Angels, white Angels
What where you waiting for by the manger?
Why were you flapping your wings
Scattering snowflakes in the dark of the night?
[...]

Angels, white Angels
Oh! Shine the light of your wings
So that he who is lost can find his way to the Lord
And so that he who is afraid to raise his eyes,
And he who is waiting without hope,
And the knight in torn armour,
Are be able to walk as Men towards the God-Man,
Angels, white Angels

Source: http://www.wyczytaj.pl/wiersze/krzysztof-kamil-baczynski/471-koleda



"65<sup>th</sup> Anniversary of the Warsaw Uprising – the Warsaw poets: Krzysztof Kamil Baczyński..." (1921–1944) 10 złoty, 2009, core: Ag 925, ring: Ag 925 plated with Au 999

Marcin Madejski
 Selection of poems and quotes: Stanisław Gorący

## Education





### The stock exchange - yesterday and today

The "Stock Exchange and Financial Markets" room at the NBP Money Centre is one of the most distinctive parts of the entire facility. It is very memorable thanks to the interior design, reminiscent of an authentic stock exchange trading hall. Meanwhile, the exhibits presented in the room – such as the trading floor bell, the ticker (stock prices display) and the wall of screens with current data from the financial market – create a unique atmosphere and immediately bring to mind the images of the trading floor of the Warsaw Stock Exchange (as well as those of other stock exchanges).

The educational offer of the NBP Money Centre has recently been extended to include new classes that enable us to make better use of the enormous potential of this attractive room. The new classes are entitled "The history of investing" and are dedicated to the students of secondary schools. In this case the lesson plan ends in an unusual manner – an open question is posed to the participants, which aims to encourage them to reflect on what they could invest their money, time, and knowledge in (also including the knowledge acquired at the NBP Money Centre), and what benefits they could achieve as a result.

It might seem that the design and the contents found in the "Stock Exchange and Financial Markets" room are more focused on contemporary times than on the past; however, the financial market (and within it, also the stock exchange) is evolving at a rapid pace. The investment tools and the market's infrastructure are developing dynamically, which constitutes a challenge not only for its participants and observers, but also for us – museum workers and educators. For this reason, updating the contents presented on the multiple



The "Stock Exchange and Financial Markets" room at the NBP Money Centre. Photo: Maciei Tretowski



The back of the worksheet with an open question

screens located in the room will be one of the priorities of the NBP Money Centre in the coming years.

Meanwhile, we strive to ensure that we are continuously supplementing our knowledge of the marketplace and its contemporary forms. In 2019, thanks to the courtesy of the Warsaw Stock Exchange Foundation, the educators and the employees of the NBP Money Centre visited the headquarters of the Warsaw Stock Exchange and learned about its educational offer. During a return visit, Tomasz Wiśniewski, the Chairman of the GPW Benchmark Supervisory Board and the Deputy Director of the IT Products and Indices Development Department at the Warsaw Stock Exchange, delivered a special lecture for the workers of the NBP Money Centre. The lecture was dedicated to the topic of the modern capital market, with particular emphasis on the specific nature of the Warsaw Stock Exchange. For the educators and the employees of the NBP Money Centre this was a perfect opportunity to verify their knowledge on the subject and to think about

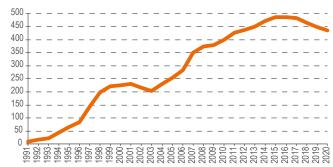
the possible changes that should be considered in the preparation of the new contents and educational activities. Although our heads are full of ideas after such a solid injection of knowledge, in this edition of "Bankoteka" we will only focus on a few changes, which allow our readers to realize that on the capital market time really goes by faster.

### The Warsaw Stock Exchange - on the road from 5 to 500 listed companies

In 2021 the Warsaw Stock Exchange (WSE), which is now the largest stock market in the region of Central and Eastern Europe, will celebrate its 30th anniversary.¹ On the 12th of April 1991 – at a time when the Polish market was being revived after many years of communism, which was not conducive to investment activity – the Minister of Ownership Transformation and the Minister of Finance – representing the State Treasury – signed the founding act of the Warsaw Stock Exchange. The first trading session took place several days later, on 16 April 1991. Compared with contemporary times, the first trading session wasextremely modest: only 5 companies participated in the session and a total of only 112 buy



The first trading session, 16 April 1991. Photo: PAP



The number of companies listed on the WSE Main Market in the years 1991–2020. Author's own study based on data from September 2020 (Source: www.gpw.pl )

and sell orders were submitted. Interestingly enough, the 5 companies from the first session are no longer listed on the Warsaw Stock Exchange today.

At present, 436 companies are listed on the WSE Main Market, of which 388 are Polish companies and 48 are foreign companies. In turn, the number of entities listed on the NewConnect market is 376 (including 5 foreign companies and 371 domestic companies).

It is also worth mentioning that in the beginning the trading sessions did not take place every day – only 36 trading sessions were conducted on the Warsaw Stock Exchange until the end of 1991. Daily sessions were only introduced in the mid-1990s. A total of nearly 7,000 sessions were held up to September 2020.

#### Profession: stockbroker

The profession of a stockbroker is inextricably linked with the stock exchange. Meanwhile, due to the influence of cinematic representations, in popular culture the image of a stockbroker is associated with a person wearing a white shirt and red braces. In reality these attributes played

Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number of sessions	36	100	152	188	249	250	249	250	249	250	250	249	251	255	251	251	249	251	252	253	251	249	247	249	251	251	250	247	248	190

Liczba sesji na Głównym Rynku GPW w latach 1991-2020

Opracowanie własne autora na podstawie danych z września 2020 r. (źródło: www.gpw.pl)

<sup>&</sup>lt;sup>1</sup> This refers to the contemporary Warsaw Stock Exchange, established after the fall of the People's Republic of Poland. It should be noted, however, that the history of exchanges on Polish territories began much earlier (commodity exchanges and merchant exchanges have the longest traditions in our country), also in Warsaw. The first stock exchange was opened in the Polish capital in 1817. In the interwar period the stock exchange in Warsaw accounted for 90 per cent of the overall turnover (the remaining 10 per cent was spread out between the stock exchanges in other Polish cities, including Kraków, Łódź, and Poznań).

<sup>&</sup>lt;sup>2</sup> As of 05.10.2020; Source: www.gpw.pl

<sup>&</sup>lt;sup>3</sup> Ibid.

**The WSE Main Market** – a stock market (functioning since 16 April 1991) operating as a regulated market, subject to supervision by the Polish Financial Supervision Authority. The items listed on the Main Market include securities and financial instruments such as stocks, bonds, subscription rights, rights to shares, investment certificates, structured instruments, and derivative instruments.

**NewConnect** - The NewConnect is an equity market based on an alternative trading system operated by the Warsaw Stock Exchange (Giełda Papierów Wartościowych w Warszawie S.A.) since 30 August 2007. NewConnect has the status of an organized market; however, it is managed by WSE outside of the regulated market, in the formula of an alternative trade system. Its offer is targeted at small and medium-sized developing companies from various sectors of the economy, including companies operating in the area of new technologies.

The primary market (IPOs – initial public offerings) – a part of the financial market where securities are issued, i.e. where the issuer sells new securities to subscribers (the initial buyers) and the capital acquired in this way goes to the issuer.

**Secondary market** – a part of the financial market where transactions on the purchase and sale of assets are carried out between the subscribers (the initial buyers) and the subsequent buyers, as well as between the successive investors. In this market the issuer no longer raises capital, but merely obtains information on the market prices and the turnover (liquidity).

The definitions of the terms "Main Market", "NewConnect", "Primary market (IPOs)" and "Secondary market" are provided on the basis of A. Tomczak, Podstawy rynku kapitałowego. Instytucje, instrumenty, metody inwestycyjne [The fundamentals of the capital market. Institutions, instruments, investment methods], Oficyna Wydawnicza Politechniki Warszawskiej, Warsaw 2020, and on the basis of information from the website www.gpw.pl

a marginal role in the history of the Polish stock market (and at present there also isn't any special dress code for stockbrokers). However, in order to increase the attractiveness of the contents, we present them in several places within the NBP Money Centre exhibition.

The role of stockbrokers in the stock exchange has evolved along with the development of technology and the expanding access to the Internet. At present, broader skills and consulting competencies are required from people who want to pursue a professional career on the financial market, and in particular in the area of investment. Initially, the process of receiving and registering orders was quite

modest – the customers submitted their orders to the local brokers. The brokers, in turn, sent them via fax to the Warsaw Stock Exchange where the orders were written down on coloured paper sheets. These sheets were then carried to the stock exchange's main trading hall where the brokers representing the companies entered the orders into the trading system. After the trading session, the information about completed orders was also sent back to the regional offices via fax.

At present, the entire process is carried out online. The individual investors only need a smartphone with the appropriate app in order to set up an investment account. Interestingly enough, all over the world the investment processes (especially those associated with risk analysis, assessment of creditworthiness, or trade in assets) are being increasingly automated. According to "The Economist", more and more financial market participants across the world are taking advantage of the opportunities offered by the development of artificial intelligence technology. "Visit a trading floor today and you will hear the hum of servers, not the roar of traders." 4 Does this mean that the profession of a stockbroker and related professions will be completely replaced by self-learning algorithms?

#### Stocks, bonds and...

The opportunities for investment have broadened significantly along with the development of the market. Potential investors have a much greater choice than ever before. In addition to the classic instruments traded on the stock market, such as stocks and bonds, many new investment products have been introduced. Moreover, the stock exchange itself has become a publicly traded company – since November 2010 it has been listed on the Warsaw Stock Exchange as "Giełda Papierów Wartościowych w Warszawie SA".

Without revealing too much in order not to spoil the future surprise, we can only announce that more novelties relating to this subject will appear in the NBP Money Centre next year.

■ Natalia Ćwik

#### Sources:

- Educational materials available at the exhibition of the NBP Money Centre (contents from the multimedia applications and the descriptions of exhibits).
- 2. www.gpw.pl
- GPW ma już 29 lat. Kiedyś handel wyglądał zupełnie inaczej [The Warsaw Stock Exchange is already 29 years old. Trading used to look very different back in the day], Bankier.pl [online], 16.04.2020 [accessed: 7.10.2020]. Available online: https://www.bankier.pl/wiadomosc/GPWma-juz-29lat-Kiedys-handel-wygladal-zupelnie-inaczej-7863195.html.
- 4. https://www.gpw.pl/fundacja-gpw.
- 5. Masters of the universe. The rise of financial machines, "The Economist" [online]. [accessed: 3.10.2019].

<sup>&</sup>lt;sup>4</sup> Masters of the universe. The rise of financial machines, "The Economist" [online], [accessed: 3.10.2019].

## The role of Kielce in the history of Polish central banking

### Evacuation of Bank Polski in March 1831 - Part 1

The fate of the Polish gold during the Second World War and the evacuation of the reserves of the Polish central bank is a well-known story, frequently described in both academic studies and popular science publications. It became an example of the responsibility, professionalism and commitment of the institutions and the people entrusted with the security of Poland's national treasure. However, few people seem to be aware that this was not the first operation of this kind. The evacuation of the resources of Bank Polski, carried out in early 1831, was just as dramatic.

While searching for the origins of these little-known events, we have to go back to a certain November night...

The cadets are going and with them goes our homeland It is calling to arms, shrouded in the dark of the night They are only accompanied by the November leaves While the pavement makes a thundering sound and then goes quiet. (Jerzy Harasymowicz, fragment of the poem "Generałowie" [The Generals], from the book of poems entitled "Wiersze sarmackie" [Sarmatian Poems], Kraków 1983, p. 118)

After the outbreak of the November Uprising on the night from 29 to 30 November 1830 the course of historical events sharply accelerated. The development of the Kingdom of Poland (established in 1815 at the Congress of Vienna and united with Russia through a personal union), which had been seemingly calm, but also marked by increasing tensions arising from the crackdown on political freedoms, was interrupted. One of the protagonists of this story - Karol Boromeusz Hoffman, a historian, lawyer, and journalist - witnessed these dramatic moments first-hand. He served as the Deputy Director of Bank Polski - the first Polish bank of issue, which was created just two years before the uprising at the initiative of the Minister of Treasury Franciszek Ksawery Drucki-Lubecki. From the very beginning this institution inspired pride and respect among both the ruling elite and the ordinary citizens. While recalling the first hours of the uprising, Hoffman wrote the following: "The first thing we had to do was to send a strong unit to the Bank in order to protect it against assault from any possible direction (...). A nation that abolishes a government, yet continues to respect the beneficial institutions and to honour property rights, thereby provides evidence that if it in fact stands up against



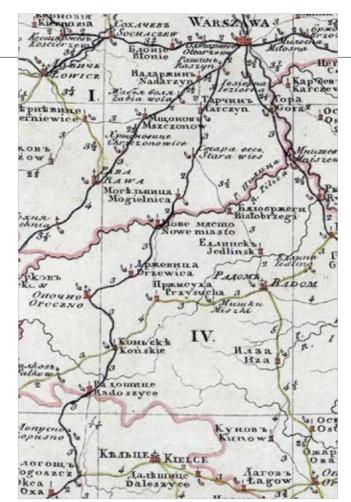
Karol Boromeusz Hoffman, the Deputy Director of Bank Polski, who supervised the evacuation of the Bank's resources in 1831. Source: https://pl.wikipedia.org/wiki/Karol\_Boromeusz\_Hoffman#/media/File:Karol\_Boromeusz\_Hoffman.jpg

the authorities, it does so for a noble cause (...), and that it has reached the highest levels of moral education".

On 25 January 1831 the Polish Seim dethroned Tsar Nicholas I, and on 5 February the Russian army, consisting of over 100,000 soldiers under the command of Field Marshal Hans Karl von Diebitsch, crossed the borders of the Kingdom of Poland in order to suppress the uprising. Warsaw was already preparing its defence from 6 February. The insurrectionary authorities adopted the concept of an aggressivedefensive battle with the use of external and internal fortifications. Although the bloody battle of Grochów, fought on 25 February 1831, thwarted von Diebitsch's plans to quickly capture Warsaw, it did not completely eliminate the threat hanging over the Polish capital. As a result, the Russian military command modified its plans - they planned to approach Warsaw from the south. The central part of the forces consisted of an army group located near Siedlee, while the right flank was formed by the Imperial Guard in the area of Łomża and Ostrołeka. It is no wonder, therefore, that already in the first days of March the insurrectionary authorities decided to evacuate all the resources of Bank Polski from the capital. These resources were to be taken to Kielce.

Why was the city of Kielce chosen? The answer seems obvious if we take into account its geographical location and the logistical considerations. Kielce was the only voivodeship-level city situated along the shortest route between Warsaw and Kraków. However, one should remember that at the beginning of the 19th century there were many indications that the best days of this former privately-owned city of the Kraków bishops had already passed. Indeed, at the turn of the 16th and 17th century the city saw a period of growth associated with the exploitation of iron and copper deposits.

The route of the convoy led through an old postal route between Warsaw and Kraków. This had been the main route - but also the fastest, and consequently, the most popular route - connecting the two cities since the days of the Polish-Lithuanian Commonwealth. Its path didn't fully overlap with the path of the well-known former national road no. 7. as it bypassed both Radom and Kielce. Numerous inns, offering rest and overnight accommodation during multi-day trips, had been operating along this route since times immemorial. During the times of the Kingdom of Poland such facilities operated, among others, in Nowe Miasto, Opoczno, Małogoszcz and Końskie. Józef Krasiński wrote the following in a guide for people traveling through Poland published in 1821: "Końskie - fairly large (town), with numerous brick houses. The local factories producing iron, arms, vehicles, and carriages are famous all throughout the country. There is also significant trade activity. Here the traveller can obtain all the products and run all the errands necessary for further travel. There are also two comfortable inns". This town was an important step on the route of the valuable transport.



The route of the evacuation of Bank Polski's resources – the postal route through Tarczyn, Mogielnica, Opoczno and Końskie on the map of the Kingdom of Poland from 1820.

Source: https://pl.wikipedia.org/wiki/

Kr%C3%B3lestwo\_Polskie\_(kongresowe)#/media/File:1820

On 4 March 1831 the first convoy consisting of three carriages left Warsaw with a military escort. It was personally supervised by the then-Deputy Director of Bank Polski Karol Boromeusz Hoffman. The convoy carried "things we can get by without, considering the Bank's operations". This included mostly covered bonds with a nominal value of 17,813,600 Polish złoty. The whole operation was not easy to execute due to the continuing hostilities and the spring thaw. After four days Hoffman reported: "On the 9th (of March) we arrived in Kielce: one of the carriages flipped over and was broken two miles outside of Kielce due to the coachman's error. This delayed our



The area around Końskie on the topographical map of the Kingdom of Poland from 1843, with a visible fork into the old postal route Warsaw-Kraków and the "Sielpie route" towards Kielce.

Source: http://maps.mapywig.org/m/Polish.maps/series/126K\_Mapa\_Kwatermistrzostwa/CP-20\_Kol\_III\_Sek\_VI.jpg

arrival and created a lot of problems, but the transported items were not affected in any way...". While there is no doubt as to the exact path of the convoy route to Końskie, the final stage of the evacuation wasn't described in detail in the surviving (incomplete) source materials. However, it seems almost certain that the convoy did not travel along the traditional route through Małogoszcz and Chęciny, but instead chose the paved "Sielpie route" from Sielpie to Kielce, which is about 37 kilometres long and which was opened in 1828. This road, built with funds from Bank Polski, was shorter. Moreover, its path, which largely overlaps with today's national road no. 74, guaranteed that the participants of the convoy would receive help from trusted people.

■ Tomasz Kaleta NBP Regional Branch in Kielce

#### References:

N. Gąsiorowska, Górnictwo i hutnictwo w Królestwie Polskim 1815–1830 [Mining and metallurgy in the Kingdom of Poland 1815-1830], Warsaw 1922.

J. Główka (ed.), Kielce przez stulecia [Kielce through the centuries], Kielce 2014.

J. Harasymowicz, Wiersze sarmackie [Sarmatian Poems], Kraków 1983.

K.B. Hoffman, Wielki tydzień Polaków, czyli Opis pamiętnych wypadków w Warszawie od dnia 29 listopada do 5 grudnia 1830 r. [The great week of the Polish people, that is, a description of the memorable events in Warsaw from 29 November to 5 December 1830]. Warsaw 1830.

J. Krasiński, Przewodnik dla podrużujących w Polsce i Rzeczypospolitey Krakowskiey [Guide for people travelling through Poland and the Republic of Kraków], Warsaw 1821. [original spelling]

K. Myśliński, Gmach Leonarda, zamierzony klasztor sióstr miłosierdzia [The Leonard Building, planned convent of the Sisters of Mercy], Kielce 2011. H. Radziszewski, Bank Polski, Warsaw 1910.

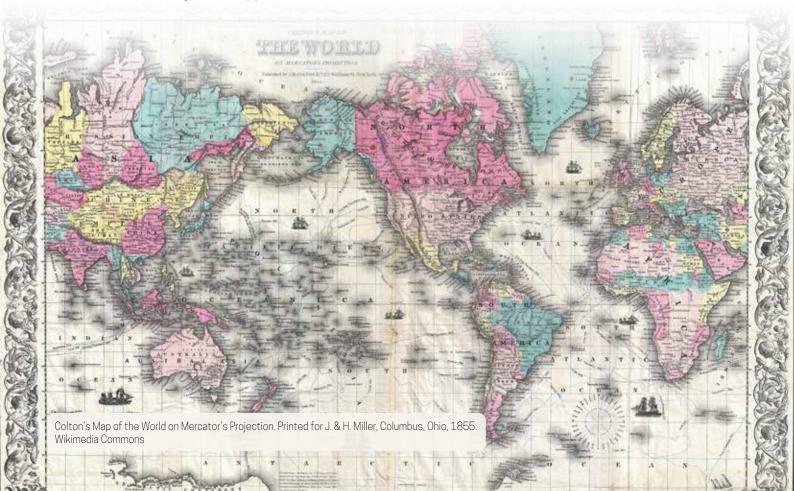
J. Strychalski, Operacyjne znaczenie Podlasia w wojnie polsko-rosyjskiej 1831 roku [The operational importance of the Podlasie region in the Polish-Russian War of 1831], "Szkice Podlaskie", 1986, vol. 2, pp. 5-14. W. Trzebiński, A. Borkiewicz, Podziały administracyjne Królestwa Polskiego w okresie 1815–1918 r. (Zarys historyczny) [The administrative divisions of the Kingdom of Poland in the period 1815-1918 (Historical Overview)], "Dokumentacja Geograficzna", vol. 4, Polish Academy of Sciences, Institute of Geography, Warsaw, 1956.

T. Ujazdowski, Opis historyczno-statystyczny Miasta Kielc [Historical and statistical description of the city of Kielce], "Pamiętnik Sandomierski", Warsaw 1929.

## Discovering multimedia... Let's open the showcases

### Global money in a non-globalized era

Cowrie shells – the most universal commodity money in the history of world trade – part 2 pp. 18–21



### Global money in a non-globalized era Cowrie shells – the most universal commodity money in the history of world trade – part 2

Long before people started minting regular coins and before the principles of the first monetary systems were established, means of payment had the form of everyday objects or natural resources, which were derived from the riches of the Earth. This was also the case with the so-called cowry shells (also known as cowries), which as early as ancient times began to function as quasi-money in communities scattered across almost all the continents. In some parts of the world, they were accepted as means of payment up to the second half of the 20th century.

#### **AFRICA**

The main and largest market for cowries (the Cypraea moneta type) was Africa, and especially the western part of the continent. The characteristic shells most likely appeared in Africa thanks to Arab merchants, who carried the cowries to its northern and western coasts. Thanks to the Mediterranean market, the shells originating from the Maldives were brought, among other places, to Morocco and Egypt. From these locations, they were transported further, either along the land route through the Sahara to the Niger river, or along the maritime route to the ports located in the Gulf of Guinea. The shells of the species *Cypraea annulus* began to reach the western part of the African continent somewhat later, most likely around the  $15^{\rm th}$  century, mainly along the sea route through the Atlantic. Their main sources were located off the eastern coast of Africa (the regions rich in cowrie shells included, among others, Zanzibar).

Cowrie shells were used as commodity money from at least the 14th century, initially mainly in the region of the Upper and Middle Niger Basin (among others, in the territory of the Mali Empire existing at that time). However, starting from the 16th century, along with the increasingly numerous expeditions of European colonizers and their exploitation of Africa, the shells gradually became a universal means of payment. The Portuguese, and later also the British and Dutch (in the 17th and 18th century), as well as the French and the Germans (in the 19th century) arriving in Africa took advantage of the local population's strong interest in the shiny shells and encouraged the African natives to use them as currency. The European states that established colonies in the areas where the cowrie shells enjoyed particular popularity were able to bring the shell money to Africa in very large amounts, transporting it aboard ships. And so, in the 19th century the British gained almost complete monopoly on the trade in the Cypraea moneta shells imported to the west coast of Africa, Meanwhile, the competing German and French merchant ships were



Cowrie shells, contemporary items. NBP collections.

carrying the heavier shells of the Cypraea annalus species and flooded the countries of East Africa with them. In exchange for the shell currency the Europeans purchased slaves (later sold at a profit in the Americas), gold, palm oil, and many other local goods. For the locals, the decision to adopt and to continue using the shell currency was in a certain sense an expression of reluctance and distrust towards metallic money, which in the conquered and colonized areas was associated with the dominance of the "white man". The shells became very desirable material goods as a sign of material status, a symbol of wealth and a carrier of tradition.

Due to the unusual aesthetic qualities of the cowrie shells, their colour, shape, and shiny texture, they were used not only as valuable jewellery, but also as amulets – symbols of femininity and fertility. In many regions of western and central Africa cowries became an inseparable decorative element of women's clothing or served as a magic cure that was supposed to have a beneficial effect on fertility. Some communities even attributed divine origin to the cowrie shells and treated them as a magical item that could extend life.

Drawing from 1845 illustrating an Arab merchant using cowrie shells as money. The drawing is a part of a collection of 10 vignettes illustrating different ways in which humans have made use of crustaceans and reptiles [in: Graphic Illustrations of Animals by R. K. Thomas, mid-19th century; Benjamin Waterhouse Hawkins].

Wikimedia Commons

One of the consequences of the large influx of cowrie shells to Africa was that the other local currencies gradually lost their importance and value or fell out of circulation. Even the salt lumps, which had been popular in some areas, lost their significance as means of payment over time. The shell money became the most popular currency on the trade routes of West Africa and started to serve as a symbol of high status and power. However, the highly differentiated value of the cowries was always decided by the laws of supply and demand. Thus, the value of the shell currency was the greater the more distant a given area from the sources

of the cowries or from large trade "centres". In places where cowries were difficult to access and only available in small quantities, a single shell could be enough to buy a cow, while in areas with abundance of cowries – for example, in the Maldives – people had to accumulate thousands of cowrie shells in order to exchange them for one gold coin.

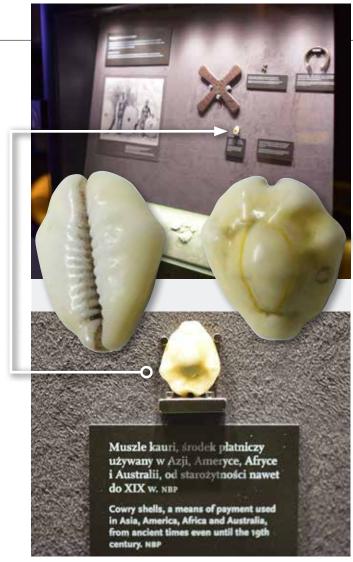
The use of shell money also had its dark side because this currency became a means of payment commonly used in the slave trade. The

surviving 17th-century notes and book entries of the accountant working on the ship "Dahomet" indicate that in the ports of the Gold Coast (i.e. mainly the Gulf of Guinea), in order to buy a woman one had to pay three barrels of brandy, two pieces of fabric, eight spools of cotton thread, and... 123 pounds of cowries. According to the exchange rate, 41 pounds was equivalent to 16,000 shells, which means that a woman cost 48.000 shells as well as the aforementioned items provided in-kind. However, the exact valuation depended on the region, because in nearby Bornu<sup>1</sup> a slave cost much less, i.e. approximately 20,000 cowrie shells. At the end of the 19th century in Sudan one cowrie was enough to buy a handful of beans or an onion. Meanwhile, a chicken cost between 30 to 150 cowries, and an egg cost 8 cowries. The price of a lion skin was 4,000 to 8,000 cowries, and the exchange rate for one dollar was 2.000 cowries. Another example of a 19th-century African community where cowries had a regular exchange rate was the Kingdom of Bamum in south-western Cameroon. Thanks to the preserved "Book of history and traditions of the Bamum" authored by Sultan Niova (who ascended to the throne in 1888) we know that even the penalties set out in certain legal case studies were supposed to be paid in the cowrie

currency. For example, for the murder of one person the perpetrator had to pay a penalty of 10,000 cowries, a traditional marriage fee cost between 8,000 and 10,000 cowries, while a person guilty of usury was punished with the refund of a half of the borrowed amount of cowries.

Along with the development of trade exchange and the growing supply of shells to the local "markets", their value gradually depreciated. While the newcomers from Portugal, England, the Netherlands, and France initially contributed to the creation and dissemination of the cowries

<sup>&</sup>lt;sup>1</sup> Kanem-Bornu - African state existing from the 9th to the 19th century in the Lake Chad region.



Cypraea moneta (money cowry) cowrie shells, Southeast Asia, 18th century, NBP collections. Exhibition in the "Antiquity-Middle Ages-Modernity" room. The showcase presents various items that served as a means of payment throughout history, in various human communities. One item that stands out among them are the cowrie shells, which were used as commodity money for over 1,500 years. The cowrie shells were used over a vast territory – from Asia and Oceania, through Europe and Africa, all the way to North America. As a result, the shell currency became the most universal commodity money in the world and survived longer than any other type of money in the history of mankind.

as a currency, in the second half of the  $19^{\rm th}$  century they played an instrumental role in its decline.

Between 1868 and 1870 British traders brought at least 6 billion new shells to the coast of Lagos in Nigeria. According to the calculations of John Hogendorn and Marion Johnson², in the period from 1850 to 1869 about 35,000 tonnes of shells were brought to West Africa, which resulted in rising inflation of the cowries. For comparison: in mid- $19^{\rm th}$  century one silver dollar was valued at 2,500 shells, and in 1857 its value doubled. In 1853 you had to pay 3,000 cowries for a quarter ounce of gold. By 1880 that price had gone up to 6,000 cowries, and by 1912 it reached 12,000 cowries.

The Western powers caused the degradation of the cowrie currency, and as a consequence, the economies based on them collapsed. However, cowries were honoured in the payment of taxes, and even the settlement of other obligations until the 20<sup>th</sup> century. It was particularly convenient to use the shells as easily quantifiable "small change", and even today they can be used to make small purchases in some regions of Africa.

Until the 1920s, thousands of tonnes of shells were brought to Africa not only from the Maldives, but also from other regions of the world, where they no longer had any significant value as a medium of exchange. While the shells disappeared from official payments both in Western and in Eastern Africa by the mid-20th century, they were still being used for small transactions, especially in the remote peripheries. One common form of payments were chains of shells on strings. Due to their attractive form, huge popularity, and the long tradition of circulation, they not only coexisted with modern means of payment, but from time to time – especially in periods of devaluation of the official money – displaced them from circulation, taking over the functions of the applicable currency.

#### **OCEANIA**

The shell money was also widely used in Oceania, and in this region of the world, on the many islands of the South Pacific Ocean, the cowrie currency survived the longest. In this part of the globe the shells were processed before they were introduced into circulation. After they were collected and dried up, the individual cowries were broken into smaller pieces of more or less the same size. After a small hole was drilled in each fragment, they were heated over a small furnace and cooled down in the water. This process was supposed to enhance the colour of the shell. The shells were then put on threads, smoothed out and polished. In this case, the high value of the cowrie was determined by the amount of work put in during their

<sup>&</sup>lt;sup>2</sup> Jan Hogendorn, Marion Johnson, *The Shell Money of the Slave Trade*, Cambridge University Press, 1986 (first edition)

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The image of a 20 cedi coin issued in Ghana in 1991. In the central part of the obverse – the coat of arms of Ghana on the reverse – a cowrie shell



5 rupees, Maldives, 2011 (paper banknote). The cowrie shells are depicted in the lower left corner on the front side of the banknote. Photo: Marcin Madeiski, private collections.

20 rupees, Maldives, 2015. A polymer banknote with the image of a cowrie shell on the front side (the yellow figure in the lower right corner). The Maldives were even described as the "cowrie islands" – the surrounding Indo-Pacific coastal waters were famous for particularly bountiful harvests of *Cypraea moneta* shells and for many centuries were among the largest natural sources of these shells. Photo: Marcin Madejski, private collections.

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PARK BELLE IN . FOR SUPER SPRINGER

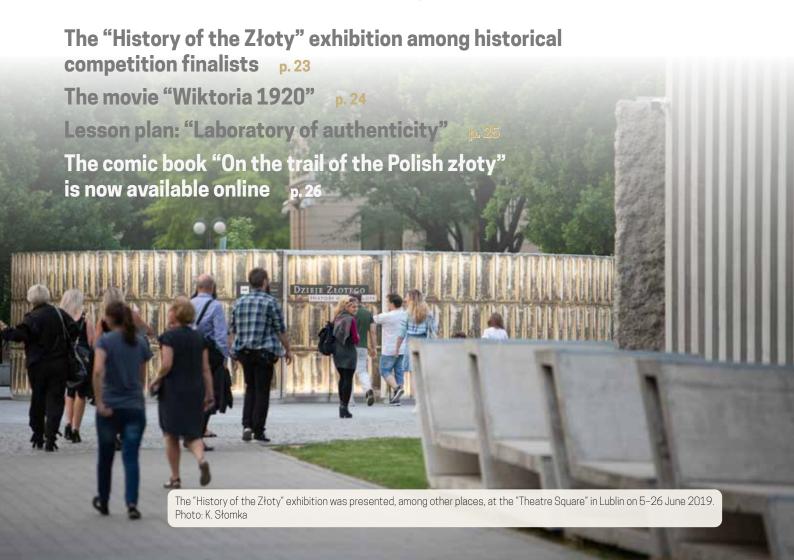
processing – this was a time-consuming multi-stage process of preparing the shells for use. Today cowrie shells no longer enjoy the status of a means of payment, but in some areas of Oceania they are still used during various ceremonies and rituals. They can serve as a dowry, as a payment for land, or as a compensation in the resolution of disputes. Cowrie strings are also used in valuable ornaments, costumes, and headgear.

One remnant of the tradition of shell money in Africa is the cedi currency in Ghana. The word "cedi" means "cowrie shell" in the local Akan language. For example, a coin with a face value of 20 cedi, issued in Ghana in 1991, featured a cowrie shell in the central part of the reverse side. Images of shells from the Cypraea moneta species can also be found in the graphic design of banknotes from other countries, mostly in South Asia, Australia, and Oceania.

For many centuries, the cowrie shells seemed to be an ideal means of payment for great numbers of people living in vast areas of the globe, stretching from South-East Asia and Oceania all the way to Africa and even North America. Cowries earned the status of a strong currency with many applications, they were an expression of wealth, and also served as amulets. The cowrie shells (or their imitations) were used as money in territories covering a much larger area than any other currency in the world. Until the Second World War, perhaps only the British pound and the American dollar were accepted as widely as cowrie shells. As a universally accepted means of payment, the cowries thus became one of the first symbols of globalization in the world of finance.

■ Anna Brzvska

# From the Calendar of the NBP Money Centre



# The "History of the Złoty" exhibition among historical competition finalists

The outdoor exhibition "History of the Złoty", prepared by the NBP Money Centre, was one of the finalists of the "Historical Event of the Year 2019" competition.

The "Historical Event of the Year 2019" is a nationwide competition held since 2007. It was initiated by the web portal historia.org.pl. The goal of the competition is to honour the authors of the most interesting historical initiatives organized in the previous year in three categories: "Exhibition", "Event", and "Education and Multimedia".

The competition organized by the Museum of Polish History is the only event of this kind where the winners are selected by both a jury of experts and Internet users. The jurors include historians, historians of art, museum workers, educators, and journalists. They evaluate all the submitted projects and select five proposals in each category. Internet users then vote on the 15 initiatives included in the final stage of the competition, and they ultimately decide which of the projects will win. This year, the Museum of Polish History received approximately 200 competition entries from Poland and from Polish community centres abroad (Austria, Argentina, Australia, Belarus, Canada, France, Germany, Hungary, Italy, Lithuania, Ukraine, and the United Kingdom).

The official gala concluding the 13th edition of the competition was held on 23 September at the Palace on the Water in Łazienki Park in Warsaw. The event was attended by representatives of almost all of the nominated and awarded institutions.

The "History of the Złoty" exhibition, dedicated to the history of the Polish monetary unit, whose origins date back to the 16th century, was awarded for its attractive narrative choices – presenting well-known events in Polish history in the context of the Polish state's economic and financial development. This allowed the viewers to understand that the currency which has accompanied the history of the Polish Republic is one of the elements of our national heritage. The jury also praised the exhibition's highly attractive graphical design (the exhibition pavilion in the shape of a coin) and its accessibility – the entrance to the exhibition pavilion was free of charge and due to special lighting solutions the exhibition could be viewed 24 hours per day.

The exhibition was presented in nine cities: Gdańsk, Katowice, Kraków, Lublin, Łódź, Olsztyn, Poznań, Rzeszów and Warsaw.

A special bilingual edition of "Bankoteka" - "Dzieje Złotego - History of the Złoty" is available on the NBP Money Centre website:

https://www.cpnbp.pl/\_data/assets/pdf\_file/0020/215552/bankoteka\_dzieje\_zlotego.pdf.

Katarzvna M. Rokosz



Invitation to the gala.
Photo: The Museum of Polish History/ M. Bodnar



Representatives of the nominated and awarded institutions, including Katarzyna M. Rokosz and Mateusz Sora from the NBP Money Centre. Photo: The Museum of Polish History/ M. Bodnar

### The movie "Wiktoria 1920"

In the period from September to November 2020 the NBP Money Centre organized screenings of the movie "Wiktoria 1920" (The Victory of 1920). The film, which was realized in the 360-degree Virtual Reality technology, commemorates the centenary of the Battle of Warsaw and the Polish-Soviet War.

Thanks to the use of state-of-the-art technologies, the viewer is completely



The movie title screen

immersed in the events depicted in the movie. After putting on the VR goggles and headphones, the audience members are taken on a journey in time. Just a few seconds after the screening of the movie begins, the viewer lands in August 1920 and becomes the movie's main character – a courier carrying a report from the frontlines to the Polish military command headquarters. While fleeing from the Bolsheviks, the viewer participates in the breath-taking events and learns about the role that the Polish Radio Intelligence Office played in the victory over the Bolsheviks.

During the filming of the movie the cameras recorded video footage from all directions. As a result, the viewer can watch the material while turning around over 360 degrees and can decide where they want to direct their

gaze and attention. The production of this type of feature films is still rare, mainly due to the numerous technical challenges faced by the filmmakers.

The movie was produced by the Office of the "Niepodległa" Programme. It was co-produced by the National Centre for Culture (Narodowe Centrum Kultury). Narodowy Bank Polski served as a partner in the production of the film.

The collector banknote "Battle of Warsaw", which was issued by NBP on 11 August this year, was described in the 23rd edition of "Bankoteka". This original banknote – the first NBP banknote with a vertical design layout – will be available for viewing in the "Creator of Money and Money Production" room.

 Małgorzata Kozłowska Fot. Cezary Pomykało



Still from the movie "Wiktoria 1920"



Still from the movie "Wiktoria 1920"

# Lesson plan: "The Laboratory of authenticity"

The team of the NBP Money Centre, in cooperation with the Publishing Division at the NBP Education and Publishing Department, has prepared a lesson plan for a 45-minute lesson for independent implementation by teachers in schools or in conditions of remote education. The project is dedicated to primary school students in grades 6-8 as well as secondary school students.



Materials for the teacher



Worksheet for the students



Worksheet for the students



Knowledge sheet for the students

The lesson is divided into two parts. The first is devoted to a discussion of the central bank's issuing function. Particular attention was paid to the security features of Polish circulation banknotes. Students learn why

the issuer (in Poland, this function is performed by Narodowy Bank Polski) wants to ensure that the cash which we all use is adequately protected against counterfeiting attempts. The negative consequences of using counterfeit money are also discussed.

The second part of the classes is practical in nature. The students have to complete tasks which help them to memorize the names of the individual security features and are then required to match them to the locations where they are placed on the Polish circulation banknotes. In the next step, everyone is able to independently check whether their answers were correct.

The materials for the classes are contained in three PDF files. The lesson plan for the teacher includes a proposed narrative for the first part of the classes, the tasks to be performed by the students along with the answers, as well as selected statistical data related to NBP's issuing activity, which may provide an additional element making the classes even more attractive.

Further files, containing the work sheet and the knowledge sheet, are intended to be distributed among the students. The files are interactive (that is, the answers can be applied directly on the PDF file), which is why they will be useful both in the framework of intramural as well as remote education.

The lesson plan be found at the www.nbp.pl website in the "Education" tab.

■ Adam Skreta

## The comic book "On the trail of the Polish złoty" is now available online

The comic book "On the trail of the Polish złoty – a story about Polish money over the course of centuries" is now available in electronic format at the www.cpnbp.pl website in the "Multimedia" tab.

This comic book is an educational publication of the NBP Money Centre that enables the reader to embark on a fascinating journey which follows the development of Polish coins and banknotes over the course of almost 1,000 years. It is now available in electronic format in the "Multimedia" tab: **Comic book - On the trail of the Polish złoty**.

The main idea which inspired the creation of the comic book was the desire to present the most important events of our history in a way that would be attractive to children and youth, and from a slightly different perspective than the one offered by school textbooks. Where did

the grosz coins come from? What were the half-threescore and tymf coins? When did people in Poland start using paper money? We would like to encourage you to check out this publication and learn many amazing facts from the history of Polish money. Thanks to its interesting graphic layout the readers will be able to better understand the historical context of the parrative.



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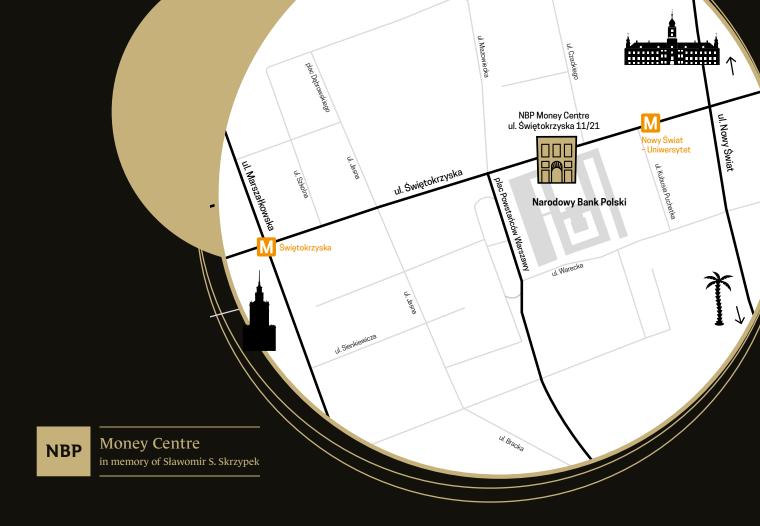
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