CENTRÁLNÍ BANKY JAKO INVESTOŘI A SOUVISEJÍCÍ STŘETY ZÁJMŮ

CENTRAL BANKS AS INVESTORS AND RELATED CONFLICTS OF INTEREST

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ABSTRAKT

Centrální banky začaly být v nedávné minulosti při naplňování cílů svých monetárních politik výrazně agresivnější než dříve. Jedním z projevů této agresivity jsou nákupy cenných papírů vydaných soukromoprávními korporacemi. Takové nákupy přináší nové právní otázky, neboť při nich dochází ke střetu zájmů mezi zákonnými mandáty centrálních bank a jejich cíli jakožto investorů. V článku je nejdříve zdokumentována nedávná historie nákupů a vlastnictví korporátních cenných papírů centrálními bankami. Poté jsou identifikovány a popsány vyvstávající střety zájmů, a na závěr navrženo jejich řešení.

ABSTRACT

In recent history, central banks started adopting significantly more aggressive measures in order to fulfil targets of their monetary policies and began including corporate securities in their purchase programmes. That presents new legal challenges because it gives rise to numerous conflicts of interest between the legal mandates of central banks and their goals as investors. The paper firstly delineates types and amounts of corporate securities purchased by select central banks. Secondly the paper identifies and describes conflicts of interest that arise out of these purchases. To conclude, a solution for these conflicts of interest is proposed.

I. INTRODUCTION[2]

Quantitative easing has taken the world of central banking by storm. At first, purchasing long-term government bond securities by central banks was viewed as unproven and dangerous, mainly due to the risk of spurring growth of inflation.[3] Subsequently, the debate shifted to a possibility of making even bolder moves. In 2020 central bankers in many countries even considered purchasing publicly traded common stocks.[4] As a consequence, modern democracies are in a situation where their respective central banks own or have owned considerable amounts of corporate securities.

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[3] Fed To Buy $600B In Bonds To Aid Economy. [online]. 3 November 2010. [Accessed 26 April 2024]. Available from: https://www.cbsnews.com/detroit/news/fed-to-buy-600b-in-bonds-to-aid-economy/.

[4] COX, Jeff. 'Nothing is out of the question': What it would take for the Fed to start buying stocks. [online]. 29 March 2020. [Accessed 27 April 2024]. Available from: https://www.cnbc.com/2020/03/29/what-it-would-take-for-the-fed-to-start-buying-stocks-during-coronavirus-crisis.html. COLDIRON, Kevin. The Fed Is Going To Buy Stocks. [online]. 18 July 2020. [Accessed 27 April 2024]. Available from: https://www.forbes.com/sites/kevincoldiron/2020/07/18/the-fed-is-going-to-buy-stocks/. AMADEO, Kimberly. 2008 Financial Crisis. [online]. 10 February 2022. [Accessed 27 April 2024]. Available from: https://www.thebalancemoney.com/2008-financial-crisis-3305679.

However, significant legal issues arise out of such purchases, because they create major conflicts of interest between legal mandates of central banks and their goals as investors. This aspect is currently being overlooked by virtually everyone, including both legal and economic scholars and experts, politicians and central bankers themselves.

Scientific literature dedicated to this issue in particular is non-existent. There are numerous economic studies dedicated to market impacts of such purchases.[5] Current academic publications in the legal field dedicated to central banking are mostly concerned with viability of central bank digital currencies.[6] Some are dedicated to the role of central banks in relation to climate change.[7] Few papers analyse legal considerations of purchases of sovereign bonds by central banks.[8] None of the papers, however, study the legal issues that arise out of purchases of *corporate* securities.

This paper is therefore necessarily partly an exploratory study which subsequent papers can build on, as it is the very first one dedicated to this issue. It aims to discover and enumerate conflicts of interest that arise out of purchases of domestic corporate securities by central banks and suggest a solution designed to prevent them. To achieve this aim, it firstly uses author's own research of data available in publicly accessible sources and the descriptive method to compile a summary of such purchases made by select central banks.

Subsequently, the paper uses this summary and author's own knowledge of capital markets to discover conflicts of interest that arise out of the studied purchases using mainly analysis and deduction. To conclude, the paper suggests a solution designed to prevent these conflicts of interest using analysis combined with evaluation.

In order to fulfil these stated objectives, the paper aims to answer following research questions:

1. Do central banks purchase corporate securities?
2. What legal issues out of such purchases?
3. Is there a possible solution to prevent these legal issues?

II. PURCHASES OF CORPORATE SECURITIES BY SELECT CENTRAL BANKS

1. United States

In the world's largest economy and most developed capital market, the United States, the quantitative easing era began after the Great Recession of 2008-09. During the first decade of the 21st century, a huge housing bubble formed. Its formation and growth were caused

5 E.g.: TODOROV, K. Quantify the Quantitative Easing: Impact on Bonds and Corporate Debt Issuance. *Journal of Financial Economics* [online]. February 2020. Vol. 135, no. 2, p. 340-358. [Accessed 23 May 2024]. DOI https://doi.org/10.1016/j.jfineco.2019.08.003. Available from: https://www.sciencedirect.com/science/article/abs/pii/S0304405X19301941?via%3Dihub.

6 E.g.: PARAJON SKINNER, C. Central Bank Digital Currency as New Public Money. *University of Pennsylvania Law Review* [online]. 18 February 2023. Vol. 172, no. 1, p. 151-218. [Accessed 23 May 2024]. DOI https://doi.org/10.2139/ssrn.4360665. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4360665
MIERNICKI, M. Cash, accounts, and central bank digital currencies: a legal view on the introduction of account- and token-based digital central bank money. *Law and Financial Markets Review* [online]. 12 February 2024. Vol. 17, no. 2, p. 88-115. [Accessed 23 May 2024]. DOI https://doi.org/10.1080/17521440.2024.2308800. Available from: https://www.tandfonline.com/doi/full/10.1080/17521440.2024.2308800.

7 E.g.: CULLEN, J. Central Banks and Climate Change: Mission Impossible?. *Journal of Financial Regulation* [online]. October 2023. Vol. 9, no. 2, p. 174-209. [Accessed 23 May 2024]. DOI https://doi.org/10.1093/jfr/fjad003. Available from: https://academic.oup.com/jfr/article/9/2/174/7091910.
PARAJON SKINNER, C. Central Banks and Climate Change. *Vanderbilt Law Review* [online]. October 2021. Vol. 74, no. 5, p. 1301-1364. [Accessed 23 May 2024]. DOI https://doi.org/10.2139/ssrn.3703142. Available from: https://scholarship.law.vanderbilt.edu/vlr/vol74/iss5/4/.

8 E.g.: DUNCAN, E. Legalizing European Central Bank Bond Purchases: How The ECB Can Protect Its Own Legitimacy And The Future Of The Euro. *George Washington International Law Review* [online]. February 2013. Vol. 45, no. 1, p. 183-213. [Accessed 23 May 2024]. Available from: https://eds.p.ebscohost.com/eds/pdfviewer/pdfviewer? Vid =5&sid =8 819f494-f8ad-4f83-89eb-6d5b54f95a55%40redis.

by a severe loosening of mortgage lending criteria fueled by historically low interest rates, deregulation of banks and a failure to spot the lurking risks on the side of rating agencies.[9] As this bubble burst, the associated shock to the whole financial system sent GDP into negative territory, unemployment soared, and deflation took place of inflation.

To combat the crisis, the Fed[10] introduced what would become known as quantitative easing 1. This measure included large-scale purchases of debt of government agencies, mortgage-backed securities and short-term government bonds.[11] However, the objectives were not fully achieved. As a result, further measures were introduced, including large-scale purchases of longer-term US government debt.[12]

Even bolder steps were taken during the coronavirus crisis in 2020. When the world shut down due to government-mandated lockdowns, none of the less radical measures were sufficient to resuscitate the freefalling economy and restore proper functioning of financial markets. Only after the Fed announced that it is willing to buy up to 750 billion USD worth of *corporate* bonds have the conditions stabilized and fears of market participants were alleviated.[13] Eligible corporate bonds were not limited to those of financially sound and stable corporations. Purchases of debt securities rated below BBB, therefore below investment grade, commonly known as "junk" bonds, were also permitted – an unprecedented intervention into the free market based on Fed's history.[14]

2. The Eurozone

The European Central Bank first employed quantitative easing by purchasing covered bonds[15] and public sector bonds in 2009 and 2010, respectively. The scale of these programmes was very modest. However, in January of 2015, the ECB deemed that inflation in the Eurozone is at unsatisfactory levels. At that time, the inflation number languished below the level of 1 % for over a year and had even peeked into negative territory.[16]

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[9] The Real Causes — and Casualties — of the Housing Crisis. [online]. 13 September 2018. [Accessed 27 April 2024]. Available from: https://knowledge.wharton.upenn.edu/podcast/knowledge-at-wharton-podcast/housing-bubble-real-causes/ RODINI, Laura. What Was the Financial Crisis of 2007–2008? Causes, Outcomes & Lessons Learned. [online]. 8 October 2022. [Accessed 27 April 2024]. Available from:https://www.thestreet.com/dictionary/financial-crisis-2007-2008.

[10] Federal Reserve, the central bank of the United States of America.

[11] Federal Reserve announces it will initiate a program to purchase the direct obligations of housing-related government-sponsored enterprises and mortgage-backed securities backed by Fannie Mae, Freddie Mac, and Ginnie Mae. [online]. 25 November 2008. [Accessed 27 April 2024]. Available from: https://www.federalreserve.gov/newsevents/pressreleases /monetary20081125b.htm.

[12] FOMC statement. [online]. 27 April 2011. [Accessed 27 April 2024]. Available from: https://www.federalreserve.gov /newsevents/pressreleases/monetary20110427a.htmFederal Reserve issues FOMC statement [online]. 13 September 2012. [Accessed 27 April 2024]. Available from: https://www.federalreserve.gov/newsevents/pressreleases/monetary20120913 a.htm.

[13] New York Fed Announces Start of Additional Secondary Market Corporate Credit Facility Purchases on June 16. [online]. 15 June 2020. [Accessed 27 April 2024]. Available from: https://www.newyorkfed.org/newsevents/news/markets/2020/2 0200615 Secondary Market Corporate Credit Facility: Program Terms and Conditions. [online]. 28 July 2020. [Accessed 27 April 2024]. Available from: https://www.newyorkfed.org/markets/secondary-market-corporate-credit-facility/secondary-market-corporate-credit-facility-terms-and-conditions.

[14] SCAGGS, Alexandra. The Fed for the First Time Can Buy Junk Bonds. That Should Help 'Fallen Angels.'. [online]. 9 April 2020. [Accessed 27 April 2024]. Available from: https://www.barrons.com/articles/the-fed-for-the-first-time-can-buy-junk-bonds-that-should-help-fallen-angels-51586449148.
Federal Reserve takes additional actions to provide up to $2.3 trillion in loans to support the economy. [online]. 9 April 2020. [Accessed 27 April 2024]. Available from: https://www.federalreserve.gov/newsevents/pressrelea ses/monetary20200409a.htm.

[15] Also known as collateralized mortgage obligations in the United States.

[16] DUNE, P. EVERETT, M. STUART, R. The Expanded Asset Purchase Programme – What, Why and How of Euro Area QE. *Quarterly Bulletin* [online]. 15 July 2015. No. 3, p. 61-67 [Accessed 27 April 2024]. Available from: https://www.centralbank.ie/docs/default-source/publications/quarterly-bulletins/quarterly-bulletin-signed-articles/the-exp anded-asset-purchaseprog.pdf?sfvrsn=8Asset purchase programmes. [online]. [Accessed 27 April 2024]. Avialable from: https://www.ecb.europa.eu/mopo/implement/app/html/index.en.html#cbpp3.

To combat this, the ECB embarked on a large-scale quantitative easing programme. At first, only public sector securities and covered bonds were eligible for purchase. Later on, as was the case in the United States, corporate bonds were also added to the list of eligible securities. Corporate bond holdings of the ECB peaked in November 2022, when their aggregate value reached 345 billion euros.[17]

3. Poland, Czech Republic and Slovakia

The National Bank of Poland does employ quantitative easing. However, only public sector debt is eligible for purchase under its programme.[18]

In aggregate, the National Bank of Poland conducts management of its reserves in a very conservative manner. Virtually all of its assets are allocated to public sector debt and gold.[19]

The Czech National Bank provides a slightly different story. As of 31st December 2022, the Czech central bank held 20 billion USD in publicly traded common stocks, which at that time represented 17.5% of the total actively managed international reserves portfolios. However, all these shares are issued by corporations domiciled in foreign countries[20] which diminishes potential legal issues.

Consequently, ownership of domestic corporate securities currently is not an issue for any of the 2 aforementioned central banks. Nevertheless, it is undeniable that willingness of central bankers to make increasingly bolder moves to reach targets of monetary policies has been increasing over the past 20 years all over the world. Therefore, it is not unthinkable that even these 2 central banks may also be owners of corporate securities in the future.

The National Bank of Slovakia, on the other hand, is a full member of the Eurosystem of central banks. Reserves under its own management are therefore minimal,[21] since their majority is being allocated according to directions set by the European Central Bank.

As a part of the Eurosystem, the Slovakian central bank is also tasked with implementing the monetary policy of the European Union as set by the Governing Council of the European Central Bank.[22] Consequently, a part of the assets purchased under the ECB's quantitative easing programmes is located directly on its balance sheet. As a result, the National Bank of Slovakia is, just like the ECB, an owner of corporate debt of European companies.[23]

4. Japan

By far the most glaring example of ownership of corporate securities by a central bank is the Bank of Japan. Roots of its quantitative easing programmes run deep, back into

[17] Asset purchase programmes. [online].
DREW, Kristian. Down but not out: the ECB and the euro corporate bond market. [online]. 27 October 2023. [Accessed 27 April 2024]. Available from: https://blog.lgim.com/categories/markets-and-economics/fixed-income/down-but-not-out-the-ecb-and-the-euro-corporate-bond-market/.

[18] Financial Statements of Narodowy Bank Polski as at 31 December 2022. [online]. 23 March 2023, p. 66. [Accessed 27 April 2024] Available from: https://nbp.pl/wp-content/uploads/2023/10/Financial-statements-of-Narodowy-Bank-Polski-as-at-31-December-2022.pdf.
SKOLIMOWSKI, Piotr. Poland Steps Up QE Program With Biggest Bond Buying Since July. [online]. 17 March 2021. [Accessed 27 April 2024]. Available from: https://www.bloomberg.com/news/articles/2021-03-17/poland-steps-up-qe-program-with-biggest-bond-buying-since-july?embedded-checkout=true.

[19] Financial Statements of Narodowy Bank Polski as at 31 December 2022, p. 5 and 22-24.

[20] Annual Report of the Czech National Bank 2022 [online] p. 159. [Accessed 27 April 2024]. Available from: https://www.cnb.cz/export/sites/cnb/en/about_cnb/.galleries/performance/annual_reports/download/vz_2022_en.pdf.

[21] International Reserves of the NBS. [online]. [Accessed 27 April 2024] Available from: https://nbs.sk/statisticke-udaje/statistika-platobnej-bilancie/devizove-rezervy/brsl/.

[22] Introduction. [online].[Accessed 27 April 2024]. Available from: https://www.ecb.europa.eu/mopo/intro/html/index.en.html.

[23] Annual Report of Národná banka Slovenska 2022. [online]. 14 March 2023, p. 85 and 97-98. [Accessed 28 April 2024]. Available from: https://nbs.sk/dokument/31785bce-196e-4111-b38f-6df0cb2f17f8/stiahnut?force=false.

the decades of the 1980s and 1990s. At that time, the Japanese economy was a powerhouse with total economic output comparable to that of the economy of the United States.[24]

It was a result of a huge economic expansion fueled by accommodative monetary policies, but also unrealistic expectations of further growth and other factors. Some of the factors were of fundamental nature. Many, however, were not, which resulted in a formation of market bubbles, mainly in the prices of real estate and stocks.[25]

Consequences of the burst of the bubbling economy were so severe that the Japanese economy has so far only been able to beat its GDP output reached at its peak in 1995 for a brief period of three years from 2010 to 2012.[26]

This lacklustre economic growth is the reason why Bank of Japan is by far the largest buyer of domestic corporate securities among the world's central banks. The decade of 1990s is famous for being called a lost decade for the Japanese economy. It was at this time that the BOJ's fight to spur economic growth and inflation started. During the decade, interest rates were being gradually lowered, eventually reaching zero in 1999.[27]

However, the lowering of interest rates was not sufficient for reaching monetary policy targets. Therefore, the BOJ stepped up its efforts, announcing its first quantitative easing programme in 2001. Eventually, more than 20 trillion yen worth of Japanese government bonds, asset-backed financial products and equities were purchased under this programme.[28] These holdings were largely unwound in 2006 due to positive inflation signs.[29]

These signs, however, proved to be only temporary. In 2010, deflation re-emerged and economic growth was again at unsatisfactory levels. In response, the BOJ unveiled new, even broader measures. The list of eligible securities was expanded – it newly also included commercial paper, corporate bonds, real estate investment trusts (REITs) and equity index ETFs.[30] Target volumes of the purchases were subsequently revised upwards multiple times, and the size of BOJ's balance sheet grew exponentially as a result.[31]

At the highest peak reached thus far, the BOJ held 70 trillion yen worth of equity ETFs, which amounts to 466 billion USD and a staggering 7 % of the whole Japanese stock market. These holdings make BOJ the largest shareholder in Japan. Its holdings amount to 80 % of all issued Japanese equity ETFs.[32]

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24 GDP (current US$) – Japan. [online]. [Accessed 29 April 2024]. Available from: https://data.worldbank.org/indicator/NY GDP.MKTP.CD?end=2022&locations=JP&name_desc=true&start=1979
GDP (current US$) – United States. [online]. [Accessed 29 April 2024]. Available from: https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?end=2001&locations=US&start=1981.

25 ITO, T. IWAISAKO, T. Explaining Asset Bubbles in Japan. *NBER Working Paper series* [online]. November 1995, p. 1. [Accessed 29 April 2024]. DOI https://doi.org/10.3386/w5358. Available from: https://www.nber.org/system/files/working_papers/w5358/w5358.pdf.

26 GDP (current US$) - Japan. [online].

27 KOWALEVSKI, P. SHIRAI, S. History of Bank of Japan's More Than Two Decades of Unconventional Monetary Easing with Special Emphasis on the Frameworks Pursued in the Last 10 Years. *ADBI Working Paper Series* [online]. May 2023, abstract and p. 2-3. [Accessed 29 April 2024]. DOI https://doi.org/10.56506/vpuh6938. Available from: https://www.adb.org/sites/default/files/publication/883946/adbi-wp1380.pdf.

28 IWATA, K. TAKENAKA, S. Central bank balance sheet expansion: Japan's experience. *Bis papers* [online]. 12 December 2023, p. 134. [Accessed 29 April 2024]. Available from: https://www.bis.org/publ/bppdf/bispap66g.pdf.
PELIN BERKMEN, S. Bank of Japan's Quantitative and Credit Easing: Are They Now More Effective? *IMF Working Papers* [online]. 1 January 2012. Vol. 12, no. 2, p. 3. [Accessed 29 April 2024]. https://doi.org/10.2139/ssrn.1997715. Available from: https://www.imf.org/external/pubs/ft/wp/2012/wp1202.pdf.

29 PELIN BERKMEN, S. Bank of Japan's Quantitative and Credit Easing: Are They Now More Effective?, p. 3.

30 Ibid, p. 3-5.

31 Japan Central Bank Balance Sheet. [online]. [Accessed 30 April 2024] Available from: https://tradingeconomics.com/japan/central-bank-balance-sheet.

32 FUJIOKA, Toru. Japan's Rapid Stock Rally Boosts BOJ's ETF Values to New Record. [online]. 16 February 2024. [Accessed 30 April 2024]. Available from: https://www.bloomberg.com/news/articles/2024-02-16/japan-s-rapid-stock-rally-boosts-boj-s-etf-values-to-new-record?embedded-checkout=true

On top of that, the BOJ has also owned as high as 12 trillion yen of corporate bonds, commercial paper and REITs.[33]

III. CONFLICTS OF INTEREST

There are good reasons for the opposition of many academics and experts against central banks' purchase programmes that target corporate securities and the central bankers' reluctance to employ them. However, they are mainly studied by economic scholars. Consequently, it is the economic and market impacts of these purchase programmes that are the primary subject of academic attention.[34]

As a result, significant legal issues that arise out of these purchases often get neglected, which this paper aims to compensate.

1. Regulatory Conflicts

Such legal issues are probably most pronounced in the regulatory area. Regulatory mandates of central banks are fairly clear and universal. They are mandated to oversee that regulations of financial markets are being adhered to in order to ensure their stability and prevent other undesirable outcomes. When rules are not being adhered to, the central banks possess the authority to issue fines or enforce other remediatory measures. Entities subject to this supervision are mainly banks and insurance companies, but also investment companies and other financial markets participants.

However, upon purchase of investment securities during the process of management of their reserves, different interests arise for central banks. An investor's objective is to achieve a return on investment, whether it be in the form of income or capital gain, or at the very least, to preserve purchasing power of the initial investment.

The process of earning a return on a bond investment is fairly straightforward. An investor either receives the contracted return, whether it be in the form of a coupon or other forms, or not. Further, the principal is either repaid in full, only partially, not at all, or possibly also produces a return in cases of purchases of bonds below face value.

Values and prices of equity securities are slightly more complicated. There are two primary components to the value of a business. Firstly, there is the value that already resides on the business's balance sheet – the cash, machinery, equipment and so forth. The second is the company itself earning a profit in its area of conducting business. An increase in trophy value can be described as a third component of value. This component is, however, far more common for art and certain real estate assets, and basically non-existent for marketable securities. It is therefore irrelevant for the purposes of this paper.

JEONG LEE, Min. FUJIOKA, Toru. A $430 Billion Habit Got Japan's Central Bank Hooked on ETFs. [online]. 7 April 2022. [Accessed 30 April 2024]. Available from: https://www.bloomberg.com/news/articles/2022-04-07/a-430-billion-habit-got-japan-s-central-bank-hooked-on-etfs?embedded-checkout=true.

33 Bank of Japan Accounts (June 20, 2022). [online]. 7 April 2022. [Accessed 30 April 2024]. Available from: https://www.boj.or.jp/en/statistics/boj/other/acmai/release/2022/ac220620.htm.

34 For reference, see:
CHAROENWONG, B. MORCK, R. WIWATTANAKANTANG, Y. Bank of Japan Equity Purchases: the (Non-)Effects of Extreme Quantitative Easing. *NBER working paper series* [online]. February 2019. [Accessed 12 July 2024]. DOI https://doi.org/10.3386/w25525. Available from: https://www.nber.org/system/files/working_papers/w25525/w25525.pdf
COHEN, L. FURMAN, I. The impact of the ECB's PEPP project on the COVID-19-Induced crisis in the corporate bond market. *Economic Letters* [online]. February 2024. Vol. 235. [Accessed 12 July 2024] DOI https://doi.org/10.1016/j.econlet.2024.111563. Available from: https://www.sciencedirect.com/science/article/abs/pii/S0165176524000478
ZAGHINI, A. How ECB purchases of corporate bonds helped reduce firms' borrowing costs. [online]. [Accessed 12 July 2024]. Available from: https://www.ecb.europa.eu/pub/economic-research/resbull/2020/html/ecb.rb200128~00e298211.en.html.

When conducting supervision of financial markets, central banks have the ability to influence both of the primary components of value in a major way.

Imposition of Fines

Central banks have the authority to issue fines to entities that are subject to their regulation. However, fines are known to have significant impacts on market values of businesses. Firstly, it is possible for a fine to be sizeable enough to account for a large part of the company's assets. Being forced to surrender a large part of its assets to the government necessarily decreases a company's net worth and therefore its value as well. Secondly, a fine also harms the business's reputation, whether it be among investors, customers, employees or others.

Both of these effects can significantly impact the market value of a company. As an example, in 2017, a study found that on average, shares of publicly traded financial companies lose 4 % of their value over 10 days following an announcement of a regulatory sanction.[35]

As mentioned, this figure represents an average result – individual cases can be much more severe. For example, shares of Lloyds Banking Group fell more than 35 % over approximately 3 months following an announcement of a regulatory sanction on 4 December 2002.

When a central bank is also a shareholder of the offending company, it may naturally wish to mitigate such a severe outcome in order to protect its interests as an investor, which directly contradicts its legal mandate as a regulator. This could potentially result in a smaller fine or no punishment at all compared to situations where the central banks lacks investment return-related interests.

Issuance of Licenses and Permits

A similar conflict of interest can occur in the process of issuing permits and licenses by central banks, as their issuance is capable of providing a significant boost to the earnings of a company. Without delving into the complexities of discounted cash flow analysis, it can be said that a company's value is based directly on its earnings. It is so because with large companies, earning power usually dwarfs their balance sheet net worth, making it almost irrelevant in the process of calculating their value.

Consequently, if receiving a broker's license had the potential to increase the earnings power of a bank by a significant amount, for example by 5 %, it should also increase the company's value by 5 %, all other things remaining equal – primarily the earnings multiplier. If the central bank, as an issuer of the license, is also a shareholder or bondholder of the applicant, it can cause it to be more motivated to accept the application than it, as a body of the state, is supposed to be. The same conflict of interest can occur with applications for an investment company's license or a takeover/merger permit, among others, notwithstanding whether the applicant is a bank, an insurance company or belongs to a different category of entities regulated by central banks.

A conflict of interests is also present when issuing licenses and permits to competitors of companies whose shares are owned by central banks. Contrarily, central banks are being motivated to reject licenses and permits in these situations, as granting them could possibly negatively affect competitive positions of their investee companies.

In closing, it is worth mentioning that a similar conflict of interest may also arise during the process of drafting new financial regulation. However, this issue should be mitigated in this area, as central banks are only one of many actors in the legislative process and any of their conflicts of interest should therefore be sufficiently compensated by impartiality of other participants.

35 ARMOUR, J. MAYER, C. POLO, A. Regulatory Sanctions and Reputational Damage in Financial Markets. *Journal of Financial and Quantitative Analysis* [online]. August 2017. Vol. 52, no. 4 p. 1438. [Accessed 1 May 2024]. DOI https://doi.org/10.2139/ssrn.1640884. Available from: https://www.jstor.org/stable/pdf/26590448.pdf?refreqid=fastly-default%3A4ea713b57e4acd77f7b2319dccf01c03&ab_segments=&origin=&initiator=&acceptTC=1.

Incidentally, when a central bank purchases equity securities, it necessarily also gains voting rights in the issuer. These can be used to influence the issuer to conduct its operations in accordance with the central bank's policies. Desirability of such exertion of state power is debatable at the least in a democratic society.

2. Conflicts Related to Monetary Policy

"Interest rates are to asset price like gravity is to the apple."[36]

When interest rates decrease, value of every asset increases. It is so because prevailing interest rates are the discounting factor in discounted cash flow analysis, the primary method for valuing cash-flow producing assets like bonds, stocks and real estate. When the discounting factor goes up, the present value of future cash flow decreases. When it goes down, the present value of future cash flows increases.[37]

Explained another way, when the interest rate on a savings account is very low, for example 2 %, investors are being motivated to invest in riskier assets such as stocks, since their return on a safe alternative would have been negligible anyway. However, had it been possible to receive a higher interest rate on safely stored savings, for example 6 %, a more attractive opportunity would have been necessary to persuade investors to allocate savings to riskier assets, as receiving a satisfactory return would have been possible in a very safe manner.

Bonds provide a similar story. If a bond pays a 3 % interest rate and prevailing interest rates change to 4 %, the market will adjust the current market value of the bond downward to a price at which it will offer a 4 % yield to maturity in line with the current interest rate environment.[38]

Thus, when interest rates increase, value of every asset decreases. As a result, when a central bank that is an owner of domestic corporate securities is forced to increase interest rates to combat high inflation, it is directly contradictory to its goal of achieving profit as an investor, which can make it reluctant to fulfil its primary mandate.

Furthermore, hiking interest rates naturally also increases the interest corporations pay on their variable interest rates obligations. Consequently, sudden interest rate increases of large magnitude can put such corporations in danger of not meeting their financial obligations, which is an even more serious situation than a decrease in current market value. If the investee company is a bank, its solvency can be threatened even in cases where no debt resides on its balance sheet. That can occur if the bank is unable to pass increased costs associated with higher interest payments paid to depositors to its clients through loans quickly enough.

Impacts of Annual Losses on Monetary Policy

As was described above, value of future cash flows, which is a key determinant of value of most assets, is dependent on interest rates. When interest rates go up, value of cash-flowing assets goes down, and vice-versa. This holds true for stocks, bonds and others.

Consequently, when a central bank is forced to increase interest rates to combat inflation, it inevitably also causes the current market value of its holdings of marketable securities issued by domestic corporations to decrease. This may, in severe cases, cause the central bank to post a loss for the present year or future ones.

[36] BUFFETT, Warren. Morning Session - 2013 Meeting. [online]. 4 May 2013. [Accessed 1 May 2024]. Available from: https://buffett.cnbc.com/video/2013/05/04/morning-session---2013-berkshire-hathaway-annual-meeting.html.

[37] For a brief explanation see: Discounted Cash Flow (DCF). [online]. Available from: https://corporatefinanceinstitute.com/resources/valuation/discounted-cash-flow-dcf/ and Discounted Cash Flow (DCF) Explained With Formula and Examples. [online]. 6 November 2023. Available from: https://www.investopedia.com/terms/d/dcf.asp.

[38] Interest rate risk — When Interest rates Go Up, Prices of Fixed-rate Bonds Fall. [online]. [Accessed 1 May 2024]. Available from: https://www.sec.gov/files/ib_interestraterisk.pdf.

Posting an annual loss is very undesirable for central banks. It can affect their reputation, the budget of the whole government and even the central banks' future monetary policies.[39] The possibility of losses was a subject of fiery debates during the process of crafting the Federal Reserve's Covid-19 response.[40]

It is certainly not an unthinkable situation. For example, the European Central Bank, the Federal Reserve and the Czech National Bank all posted annual losses in recent years with the ECB and Fed posting a loss in 2023 and the Czech National Bank in 2022. For all of these banks, it was their respective record loss. For the ECB, it was a first loss in 20 years.[41] For the Federal Reserve, it was the first loss *ever*.[42]

Importance of this evolution can perhaps be best illustrated by Federal Reserve's own proclamations. In 2011, the central bank stated:

"*In the unlikely scenario in which realized losses were sufficiently large enough to result in an overall net income loss for the Reserve Banks, the Federal Reserve would still meet its financial obligations to cover operating expenses. In that case, remittances to the Treasury would be suspended and a deferred asset would be recorded on the Federal Reserve's balance sheet.*"[43]

Only thirteen years later, this "*unlikely scenario*" is now a reality.

3. ESG Aspects

Finally, conflicts of interest can also arise in relation to central banks' ESG mandates. Involvement of central banks in the ESG area has been surging in recent years in connection with the rise in the overall societal popularity of this movement.

ESG mandates are not unified and differ materially among individual central banks. They mostly involve crafting long-term plans, agendas and goals.[44]

Among others, they also involve overseeing plans of banks related to climate risk and allocation of reserves into ESG-friendly securities.[45] This is where conflicts of interest can occur.

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[39] KORANYI, Balazs. SITHOLE-MATARISE, Emelia. Explainer: Why huge European Central Bank losses matter. [online]. 22 February 2024. [Accessed 2 May 2024]. Available from: https://www.reuters.com/markets/europe/why-huge-european-central-bank-losses-matter-2024-02-22/.

[40] TIMIRAOS, Nick. *Trillion Dollar Triage: How Jay Powell and the Fed Battled a President and a Pandemic---and Prevented Economic Disaster, p. 208.* 1. New York : Little, Brown and Company, 2022. ISBN 9780316272810.

[41] KORANYI, Balazs. FINCHER, Christina. ECB reports record loss for 2023 as rate hikes bite. [online]. 22 February 2024. [Accessed 2 May 2024]. Available from: https://www.reuters.com/markets/europe/ecb-reports-record-loss-2023-rate-hikes-bite-2024-02-22/
US Fed Records Largest Ever Operating Loss In 2023. [online]. 12 January 2024. [Accessed 2 May 2024]. Available from: https://www.barrons.com/news/us-fed-records-largest-ever-operating-loss-in-2023-73cd0dfb.
Annual Report of the Czech National Bank 2022. [online] p. 147.

[42] KUPIEC, Paul. H. POLLOCK, Alex. J. For the First Time, the Fed Is Losing Money. [online]. 26 March 2023. [Accessed 2 May 2024]. Available from: https://www.wsj.com/articles/for-the-first-time-the-fed-is-losing-money-mortage-backed-securities-treasurys-interest-rate-risk-svb-ad92e96f .

[43] KUPIEC, P. H. POLLOCK, A. J. Federal Reserve Losses and Monetary Policy. [online]. 31 January 2024, p. 7. [Accessed 2 May 2024]. DOI https://doi.org/10.2139/ssrn.4712022. Available from: https://www.aei.org/wp-content/uploads/2024/02/ Fed-losses-and-monetary-policy-Jan-31_2024-WP.pdf?x91208.

[44] DIKAU, S. VOLZ, U. Central bank mandates, sustainability objectives and the promotion of green finance. *Ecological Economics* [online]. June 2021. Vol. 184. [Accessed 2 May 2024]. DOI https://doi.org/10.1016/j.ecolecon.2021.107022. Available from: https://www.sciencedirect.com/science/article/pii/S092180092100080X
Climate change and the ECB. [online]. [Accessed 2 May 2024]. Available from: https://www.ecb.europa.eu/ecb/climate/html/index.en.html.

[45] Principles for Climate-Related Financial Risk Management for Large Financial Institutions. [online]. 30 October 2023. [Accessed 2 May 2024]. Available from: https://www.fdic.gov/news/board-matters/2023/2023-10-24-notice-dis-b-fr.pdf
Climate change and banking supervision. [online]. [Accessed 2 May 2024]. Available from: https://www.bankingsupervision.europa.eu/about/climate/html/index.en.html
ECB takes further steps to incorporate climate change into its monetary policy operations. [online]. 4 July 2022. [Accessed 2 May 2024]. Available from: https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.pr220704~4f48a72462.en.html.

When securities of corporations subject to climate-related oversight are owned by a central bank, it can cause the central bank to be more lenient in enforcing climate-related obligations to avoid damaging the corporation's reputation or harming the corporation in any other way.

In regard to monetary policy, the climate-change related agenda promotes increased buying of securities issued by corporations with "better climate performance" compared to corporations with worse climate performance and penalizing ability of the latter to obtain credit.[46] Owning securities of a corporation can encourage a central bank to be more lenient in evaluating its "climate performance" than an impartial regulator ought to be.

IV. PROPOSED SOLUTION

As was established in the paper, there are numerous conflicts of interest that arise from the ownership of domestic corporate securities by central banks. It does not seem appropriate to seek to prevent these conflicts by further regulation. The mandates of central banks are already fairly clear – monetary policy is the primary task. Ensuring financial stability and other tasks come only secondarily.

Further, central banks are not and should not be bound by a comprehensive and strict regulation. That would be very impractical, as their policies and measures often involve a need for fast and decisive actions necessary to prevent risks to the whole financial system. In particularly severe situations, central bankers have even resorted to circumventing the law.

For example, during the Covid-19 crisis, the Federal Reserve used financial engineering to circumvent the Federal Reserve Act which prohibits it from buying various securities, among them corporate bonds, by forming separate entities – special purpose vehicles – to buy them on the central bank's behalf instead.[47] The Fed used a similar course of action during The Great Recession in 2008.[48]

This paper is not meant to be a critique of the current regulation of central banks by any means. As was said earlier, the legal mandates of central banks are clear in stipulating which tasks have priority over others. The paper does not challenge that. Contrarily, it aims to point out that new circumstances have emerged that can endanger whether or not these legal mandates are being duly followed.

For these reasons, the best course of action to prevent conflicts of interest presented in the paper is not further or different regulation. Instead, the author suggests forming a new body mandated to monitor whether a state's central bank is not neglecting its legal responsibilities in favour of its reserve-management returns.

To ensure impartiality of this body, it would be best if it was not constituted by only one person, but a committee of at least 3 persons. A fitting name appears to be a "Conflicts of interest committee."

Formation of such conflicts of interest committee is undoubtedly a controversial suggestion and will rightfully receive opposition from scholars, experts and other interested parties. Its constitutionality is a very interesting topic that is broad enough to meet range requirements of a whole separate paper. It is so because independence of central banks is essential for the ability of central bankers to adopt unpopular measures when necessary to protect price stability and proper function of financial markets and forming such conflicts committee could negatively affect it.

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46 ECB takes further steps to incorporate climate change into its monetary policy operations. [online].

47 The Federal Reserve's Legal Authorities for Responding to the Economic Impacts of COVID-19. [online]. 27 March 2020, p. 2-3. [Accessed 2 May 2024]. Available from: https://crsreports.congress.gov/product/pdf/LSB/LSB10435
DORN, James A. The Fed's Corporate Lending Facilities: A Case of Pseudo Markets. [online]. 26 May 2020. [Accessed 2 May 2024]. Available from: https://www.cato.org/blog/feds-corporate-lending-facilities-case-pseudo-markets.

48 American International Group (AIG), Maiden Lane II And III. [online]. 12 February 2016. [Accessed 2 May 2024]. Available from: https://www.federalreserve.gov/regreform/reform-aig.htm.

On the other hand, conflicts of interest presented in this paper also have the potential to negatively affect proper function of financial markets, whether it be through impacting competition (license and permit issuance-related conflicts) or through neglected regulation (fine-related conflicts). What is more, as described in subchapter III.2., these conflicts can also negatively affect monetary policies of central banks, which has the potential to cause serious, primarily inflationary, consequences. For these reasons, the conflicts of interest in question should not be overlooked and appropriate attention ought to be devoted to them.

Modern democracies are built on a system of checks and balances between individual government bodies and branches and central banks are no exception. Among others, central banks are required to extensively report on their activities, whether it be to the legislative branch or to the public, and members of their governing boards are primarily appointed by the executive branch.

Moreover, as stated by Wachtel and Blejer: "*at the zero lower bound, asset purchases by the central bank can have distributional impacts that can involve political choices.*"[49] Furthermore, independence of central banks is "*a more nuanced and complex concept*" than in the past, given their role in responses to financial crises and their employment of quantitative easing.[50]

For these reasons, forming of suggested conflicts of interest committees ought to be considered.

V. CONCLUSION

Over the past 25 years, central banks have become more aggressive in the process of reaching policy goals. As a result, central banks began to include corporate stocks and bonds in their quantitative easing programmes.

The aim of this paper was to discover and enumerate conflicts of interest that arise out of purchases of domestic corporate securities by central banks and suggest a solution designed to prevent them. To achieve this aim, three research questions were set:

1. Do central banks purchase corporate securities?
2. What legal issues arise out of such purchases?
3. Is there a possible solution to prevent these legal issues?

Reaching an answer to the first research question was the principal subject of chapter no. I. It was established that central banks indeed do purchase corporate securities and that they do so in major amounts. Federal Reserve, the central bank of the United States of America, was willing to purchase up to 750 billion of US dollars in corporate bonds to stabilize capital markets during the Covid-19 crisis. The European Central Bank was also a major purchaser of corporate securities during the Covid-19 crisis, with its corporate bond holdings peaking at 345 billion euros.

The largest buyer of corporate securities among central banks is, by far, the Bank of Japan. It purchases major amounts of not only corporate bonds but equity securities as well. It owns 7 % of the whole Japanese stock market, 80 % of all issued Japanese equity ETFs and is the largest owner of stocks in Japan.

Conflicts of interest discussed in this paper are not currently an issue for central banks of Poland and Czech Republic, as they have not yet been purchasers of domestic corporate securities. Nevertheless, it is not out of question for these two central banks to become purchasers of domestic corporate securities as well given the experience from other central

[49] WACHTEL, P. BLEJER M. I. A Fresh Look at Central Bank Independence. *Cato Journal* [online]. 2020. Vol. 40, no. 1, p. 22. [Accessed 5 July 2024]. Available from: https://www.lse.ac.uk/iga/assets/documents/research-and-publications/Rockefeller-Project/Paul-Wachtel-Mario-Blejer-A-fresh-look-at-central-bank-independence.pdf.

[50] Ibid., p. 3, 21 and 22.

banks, and it is always more desirable to prevent issues beforehand rather than after they have already occurred.

In regard to the second research question, numerous situations were discovered where interests of a central bank as an investor directly contradict its legal mandate as a state body. Such conflicts of interest occur when a central bank owns securities of a corporation which it:

- imposes a fine to,
- issues a license or a permit to, or
- regulates or oversees in any other capacity.

Further, these conflicts of interest also occur when a central bank increases interest rates during the process of setting its monetary policy, since:

- increasing interest rates reduces the market value of its securities holdings,
- it can endanger financial health of corporations whose securities the central bank owns and
- it can cause the central bank to post an annual loss or losses, which is very undesirable.

Undoubtedly, conflicts of interest related to monetary policy are the most dangerous from discussed conflicts. It is so because maintaining price stability through monetary policy actions is the primary mandate of central banks and neglecting this responsibility has the potential to cause serious (most often inflationary) consequences.

To answer the final research question, a formation of conflict of interest committees of at least three members was proposed to prevent the discovered conflicts of interest. This solution was selected because further regulation would be impractical as it is beneficial for society to have central banks able to act nimbly during times of crises.

Constitutionality of such measure is an interesting question and provides an opportunity for further research in this area. However, since modern democracies are built on a system of checks and balances between state bodies and the role of central banks has become more intertwined with political decision making in recent years given their role in responses to financial crises, the suggested measure appears to be a viable option.

KEYWORDS
Central bank; Conflict of interest; Ownership of corporate securities

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