

CURRENCY REFORMS AND INFLATION IN COMMUNIST AND POST-COMMUNIST BULGARIA¹

Ralitsa SIMEONOVA-GANEVA, Martin IVANOV, Kaloyan GANEV

DOI: 10.61836/MRIS8360

Received: 10.09.2023

Available online: 21.11.2023

***Abstract:** Here we consider currency reforms, or the compulsory currency exchanges by governments, which were quite common in the first half of the twentieth century. We analyse the effects on inflation of the three currency reforms implemented by the communist regime in Bulgaria after WWII, and of the one that took place during the transition. We provide new evidence on the implemented currency exchanges and compile a time series on the quantity of money in circulation in communist Bulgaria. The collected data and facts show that, contrary to the announced aim to tame inflation through the reduction of liquidity, the three reforms conducted in communist Bulgaria had almost no effect on both money in circulation and inflation. Instead, price stability was achieved through price controls. We emphasize the fact that the growth of money in circulation followed a strong positive trend and exceeded disproportionately the official inflation and output growth. All this generated enormous price pressure and led to the unprecedented inflation rates experienced after the regime collapsed and prices were liberalized. In the following years, high inflation was additionally nurtured by the excessive growth rates of the money supply in the early stages of the transition. Our observations corroborate the fact that the introduction of the currency board arrangement in the summer of 1997 put an end to the high inflationary periods as restrictive monetary and fiscal policies were adopted. We put forward the idea that in 1999, the fourth currency reform played a role in curbing inflation expectations by reducing the scale of price variation. The combined findings of all four reforms confirm the claim that a new currency cannot serve as a tool for combatting inflation per se. It can only be ancillary to reforms establishing fiscal discipline and prudent monetary policies. A side but important finding from the study is that no revaluation of fixed assets was conducted in the 1952 reform, while all other values were considerably reduced. This means that the calculated depreciation was disproportionately higher than the other cost items, which led to significant overestimation of the reported output volumes in the subsequent years and the economic growth rates for 1952–53. Finally,*

¹ We are grateful to Prof. Roumen Avramov for his valuable comments on the draft of this article.

based on the official price-conversion rules, we propose an algorithm for converting values across the different periods.

Key words: inflation, currency reform, money in circulation, communism, transition

JEL: E31, E51, P21, P24

Introduction

The money-inflation nexus has been one of the most studied topics in economic research. From the pioneering works of the so-called early monetarists to the present-day New Keynesian DSGE models, it still generates significant controversy and advances in theory and empirics. One of the implications of this nexus is that inflation can potentially be controlled through the management of the quantity of money in an economy. Control attempts have taken the form of government policies or comprehensive reforms, e.g., ones concerning the functioning of the monetary system.

In the present paper, we consider a specific type of reform that has been used with a similar purpose: currency reform. Their nature lies in the compulsory exchange of a currency with a new one by a government decision. Such reforms were quite common in the first half of the twentieth century. One of their primary aims was to limit money supply growth and thus harness inflationary processes which were commonplace after the two world wars. The classic example is the 1921–23 German hyperinflation, which led to the replacement of the Papiermark with the Reichsmark. Our study focuses on the currency reforms carried out in Bulgaria in the twentieth century.

The Bulgarian *lev* was introduced in 1880. Despite the inflationary episodes (Balkan Wars, 1912–13; World War I, etc.), no currency reforms were carried out until 1947. Three currency reforms were implemented thereafter by the communist regime in 1947–62. Another reform took place in 1999 during the transition. Even though the currency's name remained unchanged, those reforms de facto represented acts of introducing new currencies.

The impact of the first three currency reforms on price dynamics has not received significant analytical treatment so far. In trying to fill this gap partially, we review the evolution of inflationary pressures and the quantity of currency in circulation.

Monetary data were considered highly confidential during the communist regime. Their availability in the official documents (currently declassified) is limited, and they seem to have been censored and/or biased (Avramov, 2008, p. 72). Furthermore, the content and the definitions of monetary indicators in the central bank annual reports changed considerably over time. We can still infer from those that the monetary authorities tried to manage the quantity of cash in circulation.² Two major data sources are available:

² Noted also in Avramov, 2008, p. 70. Here we choose to stick to the 'classical' definition of M0 which includes only notes and coins in circulation.

the annual reports of the Bulgarian National Bank (BNB) and the statistical yearbooks of the national statistical office. Based on those, we construct an M0 series for 1924–89.³ Data for 1990–2022 are directly available from the corresponding BNB annual reports.

The paper is structured as follows. First, we provide a brief review of the literature on currency reforms and their role in price stabilization. Then, we present chronological details on the implemented currency changes in communist Bulgaria and the period after the high inflation of 1996–97. In both settings, we analyse their outcomes. Finally, based on the official price-conversion rules, we propose an algorithm for converting values across the different periods.

Literature review

Research on currency reforms is not abundant. Most of the studies are predominantly historical reviews, accompanied by narrative analyses of outcomes. A potential explanation lies in the fact that those reforms are not characteristic of the present and are therefore not so topical.

Reforms of this type are grounded in the understanding that inflation is caused by excess liquidity held in the form of cash and deposits. For example, it was widely assumed in the post-WWII period that high liquid asset-national income ratios implied risks of hyperinflation (Gurley 1953, p. 76). Siklos (1995) finds the origins of such reforms in the presumably successful 1922–24 reform of the Soviet Union.⁴ Theurl (1994) discusses four reforms that have not been inspired by the Soviet Union: the Swiss one of 1850–53 (the introduction of the franc), the Austrian one after WWI (the introduction of the schilling), the Austrian one after WWII (the re-introduction of the schilling), and the German one after WWII (the introduction of the Deutsche Mark). Along with the historical review aimed at facilitating the introduction of a new currency (the hryvnia) in Ukraine,⁵ the analysis provides a valuable outline of the prerequisites for a successful reform. In discussing the price-level stabilization issues of Eastern European economies in the early 1990s, Sahay and Végh (1995) present a case study of the 1947 reform in the Soviet Union. One of their key points is that success depends not only on the correct adjustment of currency stocks but also on the adequate tackling of flows. Makinen (1984) considers the Greek set of 1944–46 reforms resulting in stabilization. One of the author's main takeaways is that replacing the currency is not sufficient for success if it is not accompanied by fiscal discipline and an effective way of managing the money supply. Similar lines of reasoning can be

³ K. Dimitrova and M. Ivanov construct a set of series for 1879–1947 including M0 (Dimitrova, Ivanov, 2014). Here we update the latter.

⁴ The latter led to mopping up excess liquidity by abandoning the regime of two parallel currencies (*sovznak* and *chervonetz*) and later returning to the gold standard by retaining only a gold-backed *chervonetz* (later renamed back to rouble).

⁵ Introduced in 1996, replacing the Third Karbovanets.

found in Sargent (1980) where the hyperinflation cases of post-WWI Germany, Austria, Hungary, and Poland are discussed, and in Bomberger and Makinen (1983) who deal with the Hungarian post-WWII stabilization case.

Currency reforms and inflation under the communist regime

Bulgaria remained neutral until March 1, 1941, but its economy felt the consequences of WWII. In 1939, the monetary authorities took an expansionary stance, manifested in an abrupt acceleration of currency issues. The annual rate of growth of notes and coins in circulation jumped from 6.8% in 1938 to 39.3% in 1939. It remained very high until 1944, reaching a maximum of 94.4% in 1941. The wartime period was also characterized by high inflation and shortages of essential goods.⁶

After the 1944 coup and the seizure of power by the Communist-Party-led Fatherland Front coalition, the new authorities faced severe challenges related to widespread scarcity, black markets, raging inflation, etc. Those trends were, however, not uncommon across Europe. All European authorities had to deal with more or less the same issues, especially to tame inflation. Solutions differed primarily based on the division between Eastern and Western Europe after WWII.

In Bulgaria, communist ideology was the main political determinant of authorities' behaviour. This led to the adoption of the Soviet model of banking. Briefly, it envisaged the existence of a single ("mono") bank that played the role of both a bank of issue and of commercial banks. Such an institutional setup implied complete control over the quantity of money. Paradoxically, it turned out to be precisely the opposite. The introduction of central planning was associated with the endorsement of the Marxist labour theory of value. This implied that money developments would follow the developments of the real economy. Changes in the quantity of money were planned to follow planned output. In reality, they followed changes in actual output, which often differed significantly from plans. Money was also issued to cover unplanned cash deficits emerging frequently in different parts of the economy or the state budget.⁷ Thus, monetary reactions were passive, following closely the volatility of demand. This approach to managing the quantity of money suggests it was not intended as a tool for controlling inflation. Superficially, the explanation is easy: inflation was considered to be characteristic of capitalist economies; the very notion of inflation under communism was denied. The more profound explanation still lies in the intrinsic nature of currency issues at that time.

Despite the claim of inflation impossibility, the price level was not stable (Hristoforov, 1946)⁸. This was especially true for the period 1944–51, for which inflation

⁶ In 1942, the government allowed the usage of 3% treasury bonds as legal tender which also contributed to inflation.

⁷ See also the paper of R. Avramov (Avramov, 2008, p. 7).

⁸ See also the report of BNB's governor Prof. I. Stefanov reprinted in BNB (BNB, 2004, pp. 1060–1065).

amounted to 110.6% (Ivanov, Simeonova-Ganeva, and Ganev, 2022). To tame inflation, two types of measures were introduced. One of them was typical of centrally planned economies: price controls (administratively fixed prices). The other one aimed to compensate for the impotency of money supply management and boiled down to the implementation of currency reforms.

In 1944–89, three currency reforms were conducted in Bulgaria.⁹ All of them mimicked the reforms carried out in the Soviet Union. The first two implied a very high degree of expropriation of money holdings. They were designed as one-off acts targeted at drastically reducing the potential to create inflationary pressures.

The first one took place in March 1947. It was justified *pro forma* with the need to replace worn-out and damaged old banknotes (issued before 1943). The true motivation was to expropriate assets. A very narrow window (one week) for exchange was allowed. All old notes of 200-, 250-, 500-, 1,000-, and 5,000-leva face value and all 3% treasury bonds were withdrawn from circulation. Individuals could exchange up to 2,000 leva in banknotes (1,000 leva for military personnel) at a ratio of 1:1. The remainder was transferred to frozen deposit accounts created for each household. All amounts exceeding 15,000 leva in those accounts were taxed (the property tax rates effective at this time were applied¹⁰). Enterprises could convert at the ratio of 1:1 up to 50% of the February 1947 payroll amounts. Public institutions, foreign diplomatic services, and military units could exchange up to 100% of old currency holdings.¹¹ Within less than a month, money in circulation was reduced from 70.3 billion leva to 21.9 billion leva. Although this was an unprecedented shock, its effect on the quantity of currency in circulation was short-lived. By the end of 1947, the quantity of notes and coins in circulation recovered substantially, reaching 42.0 billion leva (close to the 45.3 billion leva recorded at the end of 1946) (BNB, 1947, pp. 13–18). Concerning inflation, no significant impact could be inferred as the main drivers were not addressed at all. In particular, the inflation rate quoted by the Bulgarian National Bank was 13.9% (BNB, 1947, p. 10).¹² The lasting effect was on the distribution of wealth, which became considerably more uniform.

In 1950, BNB made its first attempts to manage the quantity of money by adopting cash and credit plans.¹³ Based on those, the government decided the amounts of money to be withdrawn or issued in the forthcoming periods. The new institutional setting determined the parameters of the second currency reform, which was carried out in

⁹ Gurley counted twenty-four reforms of this type across all Europe (Gurley, 1953). The author explicitly mentions that while in Western Europe those were one-off acts concentrated in the first years after WWII, in Eastern European countries such as Bulgaria, Poland and Romania, those were repeated, sometimes more than once.

¹⁰ One-Time Property Tax Act, *State Gazette*, Issue 146/27.04.1947.

¹¹ Central State Archive, Fund 136, Inventory 11, Archive Unit 373, pp. 5–12.

¹² The rate as calculated in (Ivanov, Simeonova-Ganeva, and Ganev, 2020), amounted to 12.3%.

¹³ The main indicator monitored thereafter was the so-called *issue outcome*.

1952, too (BNB, 2009, Part 3, pp. 599–604). The reform resembled the 1947 one: it seized wealth from the few remaining private enterprises and the richer households. At the same time, it was far more complex as it involved a wide range of conversion rates. For example, the money holdings of state-owned companies and cooperatives were converted at 25:1. For private enterprises, this ratio was applied only to payroll amounts. All remaining holdings were converted at 200:1. For individuals' cash, the ratio of 100:1 was used. For personal bank deposits, the conversion rates followed a steep scale and effectively played the role of progressive taxation.¹⁴ The reported loss of households and private enterprises amounted to 857 million new leva,¹⁵ while the exchanged currency totalled 34 billion old leva (BNB, 1952, p. 30). A rough estimate shows that the quantity of money dropped abruptly (by approximately 50%) within a week in May 1952. It was largely compensated by an increase in the quantity of banknotes and coins in circulation (86.1% year-on-year at the end of 1952).

The available sources do not provide references to any value conversion rules applicable to fixed assets (the so-called main production funds). This suggests that no conversion was applied. This is supported by the minutes of a meeting between Bulgarian and Soviet officials in 1961 in Moscow (BNB, 2009, Part 3, p. 631). One of the main points was that all accounts in the national economy were to be recalculated for the first time in the forthcoming 1962 reform, setting new values of assets. The latter implied that a revaluation did not occur in 1952.¹⁶ Hence, we conclude that the implicit rate used was 1:1. A direct implication was that the accounting value of depreciation remained artificially high. In turn, this inflated the value of products, therefore the value of aggregate output. Quite likely, this led to an overstatement of the reported economic growth rates in 1952–53.

The 1952 reform was accompanied by the abolition of rationing and the introduction of a system of fixed prices for all essential goods and services. The Soviet example was followed again. The prices were set in a way so that the essentials were made affordable.¹⁷ This, however, led to severe distortions of both nominal and relative prices and the build-up of substantial hidden inflationary pressures.¹⁸

Until 1960, deflationary trends were in place. Given the lack of prudent monetary policy and the deteriorating fiscal discipline,¹⁹ those could be attributed only to the existing price controls.

¹⁴ Central State Archive, Fund 136, Inventory 1a, Archive Unit 831, pp. 1-5. A brief discussion can also be found in (Vachkov, 2009, p. 285).

¹⁵ This value corresponds to 3.5% of the 1952 national income as reported in CSO (CSO, 1957, p. 22).

¹⁶ An indirect proof can be found also in Gurley (Gurley, 1953, p. 90).

¹⁷ Like with the 1947 reform, the only lasting effect of this one was a more uniform wealth distribution. Yet, the cost of living increased considerably due to shortages of goods and black markets and the population became poorer on average (CIA, 1952, 1953).

¹⁸ For more on this, see for example Hristov (Hristov, 2007, pp. 61–77; Avramov, 2008, pp. 102–105, 226–239, 291–294).

¹⁹ See for example BNB, 2009, Part 3, p. 393.

In the 1952 reform, the central bank also fixed both the Bulgarian lev – Soviet rouble exchange rate to 1.7, and the gold coverage of one lev to 0.130687 grams of gold.²⁰ Those ratios remained unchanged until 1962.

The third (and last) reform conducted by the communist authorities took place from January 1 to March 31, 1962. Currency was exchanged at the ratio of 10:1. The reform also included a re-scaling of all prices, wages, liabilities, etc. at the same ratio, and a complete recalculation of values of all items and assets. The gold coverage of a new lev was set to 0.759548 grams of gold, and the Bulgarian lev – Soviet rouble exchange rate was changed to 1.3.²¹

The reform was conceived as neutral to the money supply. Yet, it had a substantial unintended effect (again, a short-lived one) on the quantity of money. The news about the pending reform spread in December 1961. The population panicked, recalling the expropriations of 1947 and 1952. The result was a bank run. The withdrawn cash was immediately used to purchase whatever was available in the shops. The central bank called the event a „*psychosis*“ and a „*flight from money*“ (BNB, 1962, p. 4). It officially reported an abnormal reduction of money in circulation due to an unusually high level of consumption at the end of 1961. The aftermath was a temporary bank liquidity crisis. In 1962, after it became clear there would be no expropriation, money in circulation and bank deposits started returning to their usual levels. In the following years, positive trends in the quantity of money in circulation were observed: it increased by 23.4% in 1963 vs. the 2.3% recorded in 1962. During these years, the price level also increased: the inflation rate reached 3.1% in 1962, and 2.4% in 1963.

Taming the inflation in the 1990s

Our estimates show that the price controls during communism almost dealt with officially recorded inflation. For 1952–88, the accumulated price level increase totalled 7.5%, a low figure. For the same period, however, the quantity of money in circulation increased by 9,404.3%. Even if we account for the accumulated output growth (1,233.3% if measured using national income), this demonstrates that over those years enormous inflationary pressures accumulated. On the verge of transition, if price adjustments were to be made by authorities to deal with the imbalance between money and output growth, prices would have to be increased several times.²² The first indication of unfolding inflationary pressures was observed in 1989 when the estimated inflation rate equalled 12.6%.

²⁰ Central State Archive, Fund 136, Inventory 1a, Archive Unit 831, p. 6.

²¹ According to BNB report, the new lev was considerably stronger than the old one (BNB, 1962, p. 3). Given the conversion rate, however, the gold content of the lev shrank, i.e. it effectively depreciated.

²² Assuming a relatively stable velocity of M0, the implied increase is roughly seven times. A theoretical estimate of the inflationary potential can be found in Antonov (Antonov, 1990).

At the beginning of the 1990s, aggregate output declined significantly. The Council for Mutual Economic Assistance was disintegrated, and major export markets and suppliers were lost. Price liberalization was initiated (Zhecheva & Mileva, 1992), and market forces interplay started exerting its influence. BNB was reinstated in the role of a classical central bank and began conducting monetary and exchange-rate policies. However, old-time practices continued: money supply followed money demand.

Given the lack of economic reforms, privatization, and prudent government policies, instability, and surging inflation were inevitable consequences. The price level rose by 473.7% in 1991, followed by some disinflation in 1992 and 1993 (rates amounted to 79.4 and 63.8%). Inflation accelerated again in 1994 to 121.9%, then it slowed down temporarily to 32.7% in 1995. The economic and political crisis of 1996 brought new inflationary outbursts. At the end of this year, the recorded price level increase was 364.1%. In 1997, it skyrocketed to 547.7%, with some months being characterized by hyperinflationary rates.

For 1990–97, the accumulated inflation rate totalled 214,205.4%. It was paralleled by an increase in the quantity of currency in circulation by 21,922.3% and a decline in aggregate output by 35.7%.

The introduction of the currency board arrangement in the summer of 1997 put an end to the old practices of conducting economic policies. Currency issues were fully covered by foreign exchange reserves, and restrictive fiscal policies were adopted. The exchange rate of the Bulgarian lev was fixed to the Deutsche Mark at the ratio of 1000:1. The inflation rate fell drastically and with a few exceptions (2000, 2007, 2022) it remained at single-digit levels.

In 1999, the fourth currency reform took place. Currency was exchanged at the ratio of 1000:1 without any restrictions, and the same rate of conversion was applied to all assets, liabilities, and prices. This reform played a major role in curbing inflation expectations by reducing the scale of price variation.

Value conversion algorithm: rules and rates

The obscurity of the information provided by the communist authorities and the complexity of the currency reforms imply considerable difficulties in converting values across different periods. To help overcome those predicaments, here we propose a value-conversion algorithm that uses the available information on the technical details of the reforms (see Table 1 in the Appendix).

This algorithm could also be useful in other economic and social analyses beyond the reforms' context. Note, however, that the values that result from the application of the algorithm are not adjusted for price developments, i.e., those are still nominal values. To be able to compare inflation-adjusted values over time, the results should be deflated using an appropriate price index, such as CPI or the GDP deflator.

Conclusions

Overall, the post-WWII currency reforms aimed at taming inflation mainly through the reduction of liquidity, specifically the one generated in times of war.

Contrary to expectations, the three currency reforms conducted in communist Bulgaria had almost no effect on both money in circulation and inflation. Instead, price stability was achieved through price controls. The growth of money in circulation followed a strong positive trend in the long term and exceeded disproportionately the official inflation and output growth. Additionally, the volume of deposits increased substantially, creating a high potential for inflationary pressures (BNB, 2009, p. 391; Lilkov, 2022, p. 545). All this rationalizes the unprecedented inflation rates experienced in 1990–91. In the following years, high inflation was nurtured by the excessive growth rates of the money supply in the early stages of the transition.

The only lasting effect of the 1947–52 reforms was related to the seizure of cash from the population and private businesses. This helped the regime fund its activities. Furthermore, it led to a more uniform wealth distribution, effectively eliminating the former economic elite. The 1962 one can overall be assessed as neutral to inflation and real processes. The 1999 reform complemented the 1997 monetary reform by further lowering the inflation expectations.

The combined findings of all four reforms confirm the claim that a new currency cannot serve as a tool for combatting inflation *per se*. It can only be ancillary to reforms establishing fiscal discipline and prudent monetary policies. This is fully in line with the findings of other studies such as Sargent (1980), Makinen (1984), etc.

One of the most important findings of our study is related to the treatment of fixed assets in the currency reforms of the communist regime. Until 1962, there was no revaluation of assets in the economy. This means that the calculated depreciation was disproportionately higher than the other cost items. Therefore, there were significant distortions (overestimation) in the reported output volumes after 1952 and economic growth rates for 1952–53.

REFERENCES:

- Antonov, V. 1990. Theoretical Foundations of Inflation Under Socialism. *Ikonomika*, June (Supplement), pp. 16–28. [Антонов, В. 1990. Теоретични основи на инфлацията при социализма. *Икономика*, юни (приложение), с. 16–28].
- Avramov, R. 2008. Money and De/Stabilization in Bulgaria 1948–1989. Sofia: Institute for Studies of the Recent Past, *Ciela*. [Аврамов, Р. 2008, Пари и де/стабилизация в България 1948–1989. София: Институт за изследване на близкото минало, *Сиела*].
- Bieda, K. 1973. Copernicus as an Economist. *Economic Record*, vol. 49, no.1, pp. 89–103.

- BNB 1947. Report of the Bulgarian National Bank. Sofia: Bulgarian National Bank. [БНБ 1947. Отчет на Българска народна банка. София: БНБ].
- BNB 1952. Report of the Bulgarian National Bank. Sofia: Bulgarian National Bank. [БНБ 1952. Отчет на Българска народна банка. София: БНБ].
- BNB 1962. Report of the Bulgarian National Bank. Sofia: Bulgarian National Bank. [БНБ 1962. Отчет на Българска народна банка. София: БНБ].
- BNB 2004. Collection of Documents, 'The Records Speak' Series. Edited by Roumen Avramov, vol. 4, 1930–1947. Sofia: Bulgarian National Bank, Central State Archive. [БНБ 2004. Сборник документи, Поредица „Архивите говорят“. Под редакцията на Румен Аврамов, том 4, 1930–1947. София: БНБ, Държавна агенция „Архиви“].
- BNB 2009. Collection of Documents, 'The Records Speak' Series. Edited by Roumen Avramov, vol. 5, 1948–1990. Sofia: Bulgarian National Bank, Central State Archive. [БНБ 2009. Сборник документи, Поредица „Архивите говорят“. Под редакцията на Румен Аврамов, том 5, 1948–1990. София: БНБ, Държавна агенция „Архиви“].
- Bomberger, W., G. Makinen, 1983. The Hungarian Hyperinflation and Stabilization of 1945–1946. *Journal of Political Economy*, vol. 91, no. 5, pp. 801–824.
- CIA 1952. Monetary Reforms in Bulgaria Worsen People's Plight. Report: Information from Foreign Documents or Radio Broadcasts. Central Intelligence Agency, USA.
- CIA 1953. Effects of the Monetary Reform. Information Report: Bulgaria. Central Intelligence Agency, USA.
- CSO 1957. Statistical Yearbook of the People's Republic of Bulgaria. Sofia: Central Statistical Office, Council of Ministers. [ЦСУ 1957. Статистически годишник на Народна Република България. София: Централно статистическо управление, Министерски съвет].
- Gurley, J. 1953. Excess Liquidity and European Monetary Reforms, 1944–1952. *American Economic Review*, vol. 43, no. 1, pp. 76–100.
- Dimitrova, K., M. Ivanov, 2014. Bulgaria: from 1879 to 1947. In: *South-Eastern European Monetary and Economic Statistics from the Nineteenth Century to World War II*. Athens, Sofia, Bucharest, Vienna: Bank of Greece, Bulgarian National Bank, National Bank of Romania, Oesterreichische Nationalbank.
- Hristoforov, A. 1946. Side Notes on Inflation. *Journal of the Bulgarian Economic Association*, vol. 1–2, pp. 76–81. [Христофоров, А. 1946. Странични бележки върху инфлацията. Списание на Българското икономическо дружество, кн. 1–2, с. 76–81].
- Hristov, H. 2007. *The Secret Bankruptcies of Communism*. Sofia: Ciela. [Христов, Х. 2007. Тайните фалити на комунизма. София: Сиела].

Ivanov, M., R. Simeonova-Ganeva, K. Ganev, 2022. Long-Term Consumer Price Dynamics in Bulgaria, 1750–2020. *Proceedings of the Centre for Economic History Research*, vol. 7, pp. 23–39.

Lilkov, V. 2022. *The Economic Absurdities of Bulgarian Communism: The Intimate Confession of the State Security on the Economy*. Sofia: Ciela. [Лилков, В. 2022. Стопанските абсурди на българския комунизъм: интимната изповед на ДС за икономиката. София: Сиела].

Makinen, G. 1984. The Greek Stabilization of 1944–1946. *American Economic Review*, vol. 74, no. 5, pp. 1067–1074.

Sahay, R., C. Végh, 1995. Inflation and Stabilization in Transition Economies: A Comparison with Market Economies. *International Monetary Fund Working Paper WP/95/8*.

Sargent, T. 1980. *The Ends of Four Big Inflations*. Working Paper, Federal Reserve Bank of Minneapolis.

Siklos, P. 1995. Tales of Parallel Currencies: The Early Soviet Experience. In: Reis, J. (ed.). *International Monetary Systems in Historical Perspective*, pp. 231–258. London: MacMillan.

Theurl, T. 1994. Experiences with Monetary Reform in Western European Countries with different Levels of Development. Working Paper, Institute for Advanced Studies, Vienna.

Vachkov, D. 2009. The Economy of Communist Bulgaria (1944–1962). In: Znepolski, I. (ed.). *History of the People’s Republic of Bulgaria: Regime and Society*, pp. 263–302. Sofia: Institute for Studies of the Recent Past, Ciela. [Вачков, Д. 2009. Икономиката на комунистическа България (1944–1962). В: Знеполски, И. (ред.). *История на Народна Република България: режимът и обществото*, с. 263–302. София: Институт за изследване на близкото минало, Сиела].

Warburton, C. 1945. The Volume of Money and the Price Level between the World Wars. *Journal of Political Economy*, vol. 53, no. 2, pp. 150–163.

Zhecheva, M., N. Mileva, 1992. *Price Controls and Inflation in Bulgaria, 1991–1992*. Sofia: Agency for Economic Coordination and Development.

Appendix

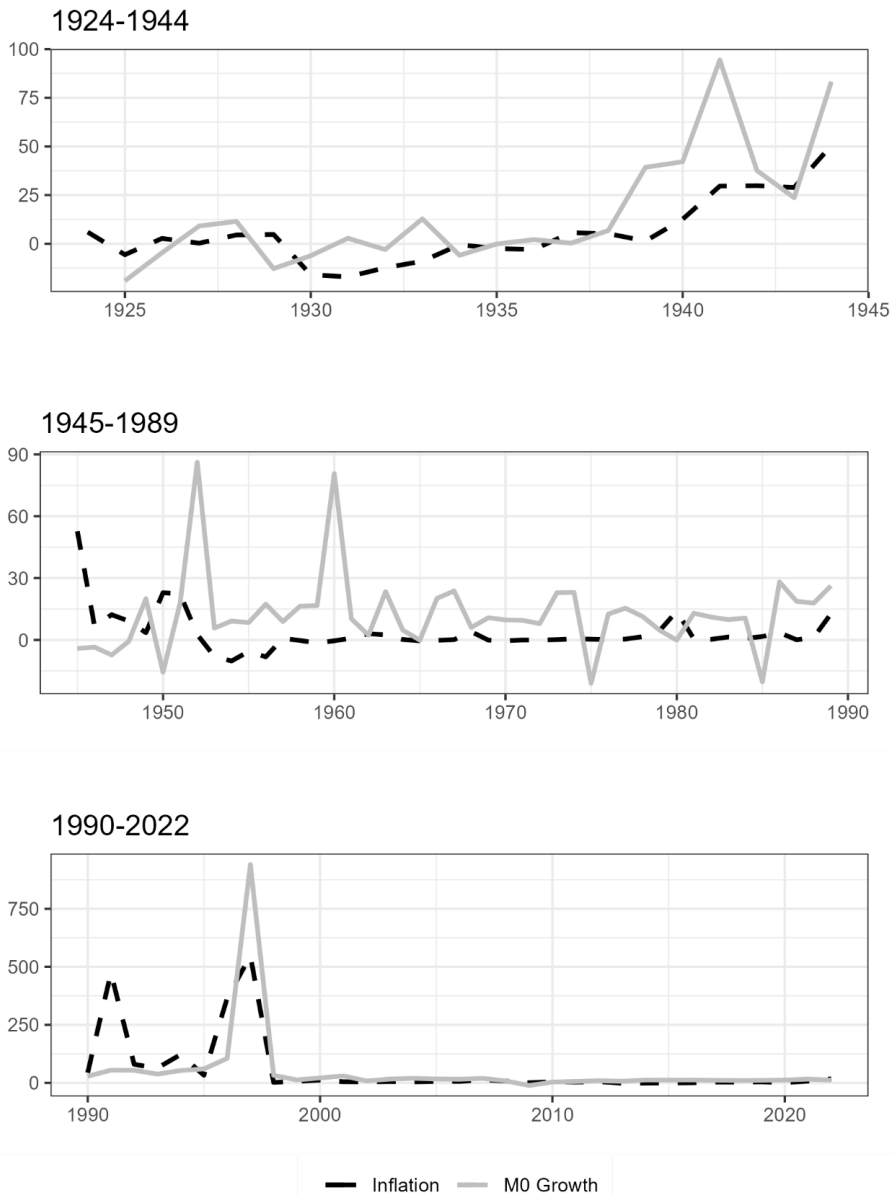


Figure 1. M0 and inflation, annual growth rates

Source: own calculations

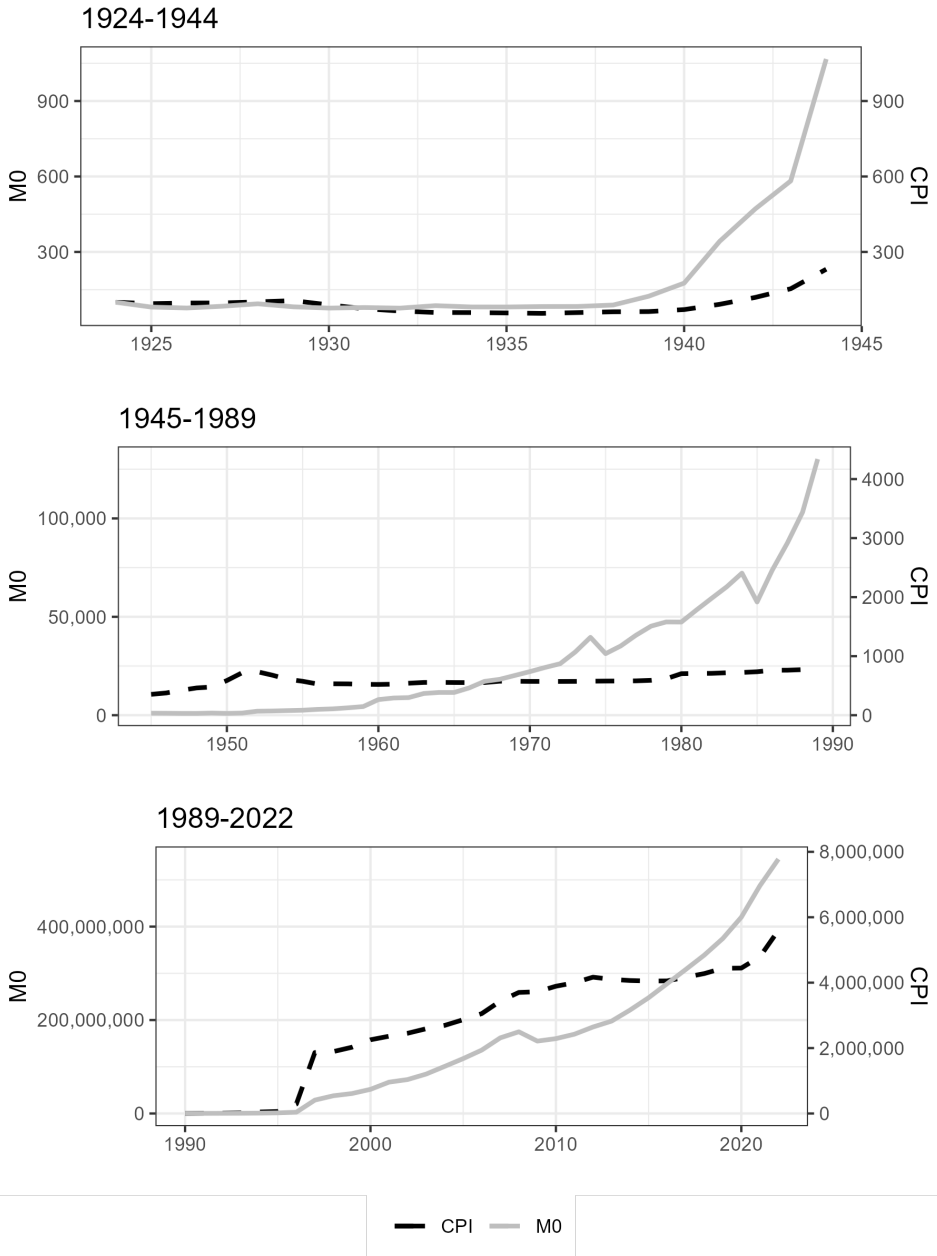


Figure 2. M0 and inflation, 1924=100

Source: own calculations

Table 1.

Conversion of X 1946 leva over time

Items	1947	1952	1962	1999
<i>Cash held by persons/households</i>				
Up to 2 000 leva per person	$Y = 1 \cdot X$	$Z = \frac{1 \cdot Y}{100}$	$V = \frac{Z}{10}$	$W = \frac{V}{1000}$
Up to 15 000 leva per household in frozen deposit accounts	$Y = 1 \cdot X$	$Z = \frac{1 \cdot Y}{100}$	$V = \frac{Z}{10}$	$W = \frac{V}{1000}$
Amounts in excess of 15 000 leva per household in frozen deposit accounts	$Y = X - \text{property tax}$	$Z = \frac{1 \cdot Y}{100}$	$V = \frac{Z}{10}$	$W = \frac{V}{1000}$
<i>Cash held by enterprises</i>				
Private enterprises: Payroll amount, with a wage ceiling of 35 000 leva per person	$Y = \frac{X}{2}$	$Z = \frac{1 \cdot Y}{100}$	$V = \frac{Z}{10}$	$W = \frac{V}{1000}$
State-owned enterprises and public institutions: all amounts	$Y = 1 \cdot X$	$Z = \frac{1 \cdot Y}{100}$	$V = \frac{Z}{10}$	$W = \frac{V}{1000}$
<i>Deposits</i>				
Deposits of children, orphans, etc.	$Y = 1 \cdot X$	Up to 50 000 leva: $Z = \frac{4 \cdot Y}{100}$ 50 001 – 100 000 leva: $Z = \frac{3 \cdot Y}{100}$ Above 100 000 leva: $Z = \frac{2 \cdot Y}{100}$	$V = \frac{Z}{10}$	$W = \frac{V}{1000}$
Saving deposits for house purchases	$Y = X - \text{property tax}$	Up to 200 000 leva: $Z = \frac{3 \cdot Y}{100}$ Above 200 000 leva: $Z = \frac{2 \cdot Y}{100}$	$V = \frac{Z}{10}$	$W = \frac{V}{1000}$
All other deposits of persons	$Y = X - \text{property tax}$	Up to 50 000 leva: $Z = \frac{3 \cdot Y}{100}$ 50 001 – 100 000 leva: $Z = \frac{2 \cdot Y}{100}$ 100 001 – 200 001 leva: $Z = \frac{1.5 \cdot Y}{100}$ Above 200 000 leva: $Z = \frac{1 \cdot Y}{100}$	$V = \frac{Z}{10}$	$W = \frac{V}{1000}$
Deposits of private enterprises	$Y = X - \text{property tax}$	Up to the payroll amount: $Z = \frac{4 \cdot Y}{100}$ Above that amount: $Z = \frac{Y}{200}$	$V = \frac{Z}{10}$	$W = \frac{V}{1000}$
Deposits of public enterprises and institutions	$Y = X - \text{property tax}$	$Z = \frac{4 \cdot Y}{100}$	$V = \frac{Z}{10}$	$W = \frac{V}{1000}$
<i>Wages</i>	$Y = 1 \cdot X$	$Z = \frac{4 \cdot Y}{100}$	$V = \frac{Z}{10}$	$W = \frac{V}{1000}$
<i>Fixed assets</i>	$Y = 1 \cdot X$	$Z = 1 \cdot Y$	$V = \frac{Z}{10}$	$W = \frac{V}{1000}$
<i>Rent</i>	$Y = 1 \cdot X$	$Z = \frac{4 \cdot Y}{100}$	$V = \frac{Z}{10}$	$W = \frac{V}{1000}$
<i>Prices</i>	$Y = 1 \cdot X$	$Z = \frac{4 \cdot Y}{100}$	$V = \frac{Z}{10}$	$W = \frac{V}{1000}$
<i>All other, assuming amounts and assets are not confiscated</i>	$Y = 1 \cdot X$	$Z = \frac{4 \cdot Y}{100}$	$V = \frac{Z}{10}$	$W = \frac{V}{1000}$

Table 2.

Banknotes and coins in circulation (M0), in thousands of leva

Year	Currency: lev, issued in 1880	Year	Currency: lev, issued in 1952	Year	Currency: lev, issued in 1962	Year	Currency: lev, issued in 1999
1924	4 591 783	1952	927 579	1962	410 665	1999	1 961 601
1925	3 714 019	1953	980 910	1963	506 831	2000	2 374 112
1926	3 542 165	1954	1 070 895*	1964	530 950	2001	3 081 023
1927	3 865 746	1955	1 160 880	1965	530 359	2002	3 334 922
1928	4 309 451	1956	1 362 550	1966	637 442	2003	3 874 108
1929	3 759 378	1957	1 484 036	1967	788 945	2004	4 627 875
1930	3 528 667	1958	1 727 036	1968	836 702	2005	5 395 515
1931	3 628 738	1959	2 015 505	1969	926 791*	2006	6 230 673
1932	3 520 502	1960	3 641 015	1970	1 016 879	2007	7 433 358
1933	3 971 083	1961	4 013 650	1971	1 113 605	2008	8 029 165
1934	3 736 256			1972	1 201 547	2009	7 114 909
1935	3 731 601			1973	1 476 575	2010	7 356 650
1936	3 811 462			1974	1 817 374	2011	7 793 381
1937	3 822 725			1975	1 436 100	2012	8 499 217
1938	4 082 556			1976	1 616 100	2013	9 075 151
1939	5 686 557			1977	1 865 100	2014	10 168 103
1940	8 082 561			1978	2 078 100	2015	11 377 794
1941	15 713 888			1979	2 176 100	2016	12 761 577
1942	21 621 425			1980	2 174 100	2017	14 148 543
1943	26 736 898			1981	2 455 600	2018	15 560 793
1944	48 993 156			1982	2 728 600	2019	17 192 592
1945	46 965 411			1983	2 997 600	2020	19 290 714
1946	45 325 256			1984	3 315 300	2021	22 377 555
1947	42 024 734			1985	2 641 900	2022	24 998 439
1948	41 736 245			1986	3 384 900		
1949	50 081 246			1987	4 018 900		
1950	42 237 000			1988	4 735 900		
1951	49 829 000			1989	5 976 900		
				1990	7 676 900		
				1991	11 866 000		
				1992	18 268 000		
				1993	25 151 000		
				1994	38 498 000		
				1995	61 616 000		
				1996	126 463 000		
				1997	1 316 248 000		
				1998	1 743 011 000		

* The value is interpolated due to information gaps in the data sources

Source: own compilations based on the Annual Reports of the Bulgarian National Bank for the period 1939–2022, and the Statistical Yearbooks, published by the statistical authorities in 1924–89

Correspondence address:

Ralitsa Simeonova-Ganeva – Associate Professor, PhD

Sofia University St. Kliment Ohridski, Faculty of Economics and Business Administration, Department of Statistics and Econometrics

Address: 125, Tsarigradsko Shosse Blvd., Block 3, 1113, Sofia

Tel: (+ 359) 898 226536

E-mail: r_ganeva@feb.uni-sofia.bg

SCOPUS Researcher ID: 56902560300

Web of Science Researcher ID: AAM-1746-2021

<https://orcid.org/0000-0001-5309-546X>

Correspondence address:

Martin Ivanov – Associate Professor, DSc

Sofia University St. Kliment Ohridski, Department of Sociology

Address: 2 Academic Rostislav Kaishev block 4, 1113 Sofia

Tel.: (+ 359) 884 722105

E-mail: martin_ivanov@phls.uni-sofia.bg

SCOPUS Researcher ID: 55415194800

Web of Science Researcher ID: AAZ-6304-2021

<https://orcid.org/0000-0002-3912-4014>

Correspondence address:

Kaloyan Ganev – Associate Professor, PhD

Sofia University St. Kliment Ohridski, Faculty of Economics and Business Administration, Department of Statistics and Econometrics

Address: 125, Tsarigradsko Shosse Blvd., Block 3, 1113, Sofia

Tel: (+ 359) 899 176456

E-mail: k_ganev@feb.uni-sofia.bg

SCOPUS Researcher ID: 57219180386

Web of Science Researcher ID: D-7766-2011

<https://orcid.org/0000-0002-2966-6303>