Journal of Economic Analysis

Homepage: https://www.anserpress.org/journal/jea

Inflation: Thruway of ECB's Monetary Policy

Christian Seidl [a,*]

[a] *Department of Economics, Kiel University, Kiel, Germany*

ABSTRACT

Part of the present inflation is caused by the breakdown of globalization, in particular supply chains, part is caused by the Corona Pandemic, in particular lockdowns, part is caused by the Ukrainian War, part is caused by European sanctions, and part – and not the smallest one – is caused by the European Central Bank's printing money by hook or by crook in the past and in the presence. This paper attributes inflation decisively to the overwhelming money creation by the European Central Bank.

KEYWORDS

Inflation; Monetary Unions; Central Bank Policy; Money Supply; Interest Rates; Financial Markets

* Corresponding author: Christian Seidl
E-mail address: seidl@economics.uni-kiel.de

ISSN 2811-0943
doi: 10.58567/jea02010001
This is an open-access article distributed under a CC BY license
(Creative Commons Attribution 4.0 International License)

Received 9 February 2023; Accepted 23 February 2023; Available online 25 February 2023

1. Introduction

Before the introduction of the Euro, the Mediterranean European countries followed a lax monetary policy. They ran considerable budgetary deficits. They usually covered their budgetary deficits by inflation and their public debts were rather high. Therefore, maintenance of international competitiveness required periodical devaluations of their currencies. Since currency devaluation and the risk of default were factored in the interest rates of these countries, their interest rates were rather high. The introduction of the Euro caused an immediate fall of their interest rates in the direction of the German interest rate because the international financial market ignored the no bailout clause of Article 125 of the Treaty on the Functioning of the European Union (TFEU). The Mediterranean countries felt relief of the restrictive interest burden and, rather than dissipating their public and private debts, in the first seven to eight years after the introduction of the Euro considerably increased their indebtedness. The international financial market readily financed their debts. This ended abruptly with the International Financial Crisis 2007/08. The international financial market withdrew its credits and gave credit only at exorbitantly high interest rates which would have strangled the Mediterranean countries. In order to "rescue" the Euro, the European Central Bank (ECB) stepped in and created fiduciary money by hook or by crook.

At the beginning of the European Monetary Union, in cases of short-term refinancing, banks could draw on credits of the ECB for several days or weeks. After the Financial Crisis this was extended to Longer Term Refinancing Operations (LTRO). In 2014, a program called Targeted Long Term Refinancing Operations (TLTRO) was created for inducing banks to grant credits also to private enterprises up to four years. In March 2019 it was accompanied by subsidizing the commercial banks for granting credits. The central banks of member countries in financial distress were allowed to create fiduciary money under the program Emergency Liquidity Assistance (ELA). By 2011, Mario Draghi, then president of the ECB, started quantitative easing, i.e., purchasing exorbitant amounts of public bonds financed by the creation of central bank money. He also decreased the interest rates, eventually to a negative interest rate of 0.5 percent. In addition to that, several European Rescue Funds (ERS) were established. Besides that, the Agreement on Net Financial Assets (ANFA) allowed the central banks of member countries the creation of central bank money for financing national investments. Whereas in the first seven to eight years of the European Monetary Union the balances of foreign trade among the member countries were by and large settled by taking out credits from the financial market, this possibility petered out after the Financial Crisis. This induced the ECB to abandon settlement of foreign trade balances altogether, thereby heaping up exorbitant credit and debit balances which accelerated fiduciary money creation.

These were the sources of fiduciary money creation by hook or by crook. Curiously enough, this monetary backlog did not lead to inflation (in the sense of the ECBs understanding as soaring consumer prices) up to the third quarter of 2021. Rather this money was wound up in the financial sector (commercial bank deposits with the ECB; private savings accounts) or spent for asset inflation (real estate, corporate stock, bonds, insurance policies). Only because of recent supply shortages, due to the breakdown of globalization and supply chains consequential of the Corona Pandemic and the Ukrainian War, part of the hoard of money diverted to consumption and caused the current inflation.

2. Necessary and Sufficient Conditions of Inflation

Presently inflation plagues both the United States of America and the and European Union. But inflation occurs in rather different environments. Usually, the formation of states precedes the introduction of their currencies. But in case of the European Union the introduction of the Euro preceded the possible formation of a state to be called *United States of Europe*. Hence, the Euro is the outcome of a monetary union rather than a currency of a uniform state. Moreover, not all members of the European Union participate in the European Monetary Union. Bulgaria, the

Czech Republic, Denmark, Hungary, Poland, Rumania, and Sweden are not members of the European Monetary Union. Croatia became a member of the European Monetary Union as of January 1st, 2023. When the United Kingdom was a member of the European Union, it refrained from becoming a member of the European Monetary Union. The founding fathers of the European Union and the Euro expected the Euro to thrive in the European environment, notwithstanding that history had witnessed the failure of monetary unions, such as the Scandinavian Monetary Union and the Latin Monetary Union (for the latter cf. Willis 1901). Note that, whereas the impacts of inflation in the United States of America and in the European Union are comparable, the settings of their emergence are rather different. The focus of this paper deals with the situation in the European Monetary Union.

Inflation can occur only if two *necessary* conditions are met: first, expenses must exceed receipts and, second, money must be created to bridge this gap; both conditions apply to the public sector only. This implies that, whenever inflation is present, these two conditions must be fulfilled. Note that the opposite does not hold, that is, whenever these two conditions do hold, inflation need not emerge. Inflation is bound to follow whenever additional *sufficient* conditions step in. The sufficient conditions depend on the prevailing circumstances. This paper also deals with the sufficient conditions of inflation in the European System of Central Banks (ESCB).

3. Overspending Money: A Taxonomy of Solutions

Overspending money can affect the private sector of an economy, viz. households or firms, or the public sector. For the private sector, the solution is straightforward: a household or a firm can either apply for a credit, or is bound to declare bankruptcy. The former solution means either the inclusion of banks or – for big firms – the capital market. Declaring bankruptcy involves the courts of law with the usual consequences.

For the public sector the solution is more complicated. One must discern between domestic and international economy. For the domestic economy, overspending money manifests itself as a budgetary deficit. It can be covered in four ways, first, by increasing taxes, second, by issuing public bonds, third, by reducing public expenditure, and, fourth by printing (i.e., creating) money. Printing money means that the government first issues public bonds and induces the national central bank to create the necessary amount of money for buying these bonds. Note that printing money does not work for currencies under a gold standard.[1] For a monetary union, money printing (money creation) is in principle monitored by the superior central bank.

For the international economy, overspending money for imports manifests itself as a foreign trade deficit. It can be solved in four ways, first, by devaluation of the own currency, second, by applying for foreign credits (inclusive of issuing bonds on the international financial market), third, by import control, and, fourth, by austerity programs. Note that devaluation of the own currency for a single country does not work under a monetary union.

High indebtedness and high foreign trade deficits of a country are interlinked. Normally, highly indebted countries encounter higher rates of interest for raising credits, because they exhibit higher risks of insolvency, which is factored in the respective rates of interest. If a country's indebtedness exceeds certain limits, this country is considered insolvent and is barred from the international capital markets and from foreign trade. Allowing for the different size of countries, the standard of their indebtedness is the public debt ratio, measured by the ratio of their public debt and their GDP. But this is a rough guideline only and is scattered among countries.

For this paper, let us focus on public overspending of money in democratic states, which means that the population can exert some influence on political measures via periodic elections. Increasing taxation and reducing public expenditure will meet fierce resistance by the population. Asking for credit or issuing public bonds meets only minor resistance by the population unless it is granted by international institutions such as the International Monetary Fund (IMF) which usually require increasing taxes or imposing austerity programs.

[1] In an early paper, Greenspan (1966) proved to be a fervent champion of the gold standard.

Hence, it is tempting for democratic governments to hide behind an autocratic institution whose leading members enjoy immunity, have no responsibility for their actions except for sentences of an international court, are appointed clandestinely by a few influential politicians, and are devoid of any democratic legitimization which otherwise could repudiate their re-election. For the European Monetary Union this is exactly the case of the ECB which has, especially since the presidency of Mario Draghi, repeatedly violated the TFEU. Rather than abrogating illegitimate measures of the ECB, the European Court of Justice (ECJ) repeatedly approved of ECB's contravention of the TFEU, because majority of its judges decided in favor of the debtor states which had delegated them to the ECJ. The most spectacular example provides the judgment of the German Constitutional Court (Bundesverfassungs-gericht) on ECB's monetary contravention whose judgment of May 5th, 2020, was knocked over by the ECJ in concert with the ECB.

4. Equating Price Stability with Inflation

Article 127, paragraph 1, of the TFEU states that the main objective of the ESCB shall be to *"maintain price stability. Without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Union..."* In basic terms, price stability means the *absence of inflation*. Despite this legal mandate, ECB spared no effort reversing peoples' minds to equate price stability with *two percent inflation*. This deliberate attempt reminisces George Orwell's examples of *Newspeak* words in his dystopian novel *1984*. People should be induced to consider two mutually exclusive beliefs as though they were the same. The concepts "price stability" and "two percent inflation" should be amalgamated to an identical virtual concept and should no longer be distinguished.

What are ECB's arguments that two percent inflation means price stability? The ECB relied on two reasons. First, it argued that price stability will sooner or later lead to stagflation and economic depression by claiming that declining prices would induce consumers and investors to defer consumption and investment, respectively. This would ultimately lower demand and thus impair economic prosperity. Hence, ECB followed a policy of a two percent inflation rate. But, on the contrary, in the real world a severe economic depression occurred lastly during the Great Depression of 1929 and its aftermath. Second, it wanted combatting unemployment. However, Europe presently does not suffer from unemployment, but from a severe lack of workforce.

Hence, ECB's true motive for its inflationary policy must be different. I suspect that the ECB's true intention consists in using inflation to dwindle the value of public debt. An inflation of two percent will reduce the real value of public debt to 54.55 percent after 30 years. This means that the ECB established an additional inappreciable tax to unburden the member countries of the European Monetary Union of their public debt. This was particularly intended with respect to the Mediterranean countries in mind.

A pivotal cue is the history of the Mediterranean countries before the introduction of the Euro. They were considerably less productive than the Northern European countries. For preserving international trade compete-tiveness, they regularly devalued their currencies. Since the international capital market was aware of the risk associated with currency devaluation, this risk was factored into the interest rate to compensate for currency devaluation. These high interest rates affected both private and public debts, causing a backlog of consumption of costly consumer goods, and investment in housing, business, and public expenditure. With the advent of the Euro, the interest rates shrank to the level prevailing in Northern European countries until the outbreak of the Financial Crisis in 2007 (Sinn 2021, p. 32). This cheap money caused widespread economic revival. But instead of seizing the opportunity to redeem past private and public debts, the Mediterranean countries considerably increased their indebtedness. Since the "no bailout clause" of Article 125 of TFEU was not taken seriously by the international financial market, the Mediterranean countries could, at that time, get any credit from there.

Alas, because of the Euro, devaluation of the money circulating in Mediterranean countries was no longer viable. Attendant of the Financial Crisis, the international financial market suddenly awakened to the low productivity of

Mediterranean countries and their high levels of private and public debt. This was the last straw that broke the camel's back. The international capital market neither granted more credits, mainly to Mediterranean countries, nor prolonged due credits. If credits were granted at all, it was at very high rates of interest (Sinn 2021, p. 32). If the private and public sectors of the Mediterranean countries had to shell out interest rates as they had to pay between 2009 and 2012, they would have gone bankrupt. This triggered the outbreak of the Euro Crisis. ECB's two-percent-remedy for alleviating public indebtedness, mainly of the Mediterranean countries, had failed preventing the crisis of the Euro. The two-percent inflation was not high enough to unburden the Mediterranean countries of their debt.

5. "Rescuing" the Euro by Creation of Excess Fiduciary Money

Starting from the beginning of the European Monetary Union, banks could draw on credits of the ECB for several days or weeks. After the Financial Crisis, this was extended to LTRO extending up to twelve months. With hopes to avoid the looming jeopardy, the Mediterranean countries longed for a white knight in shining armor who could continue the flow of cheap money. Eventually, on November 1st, 2011, a white knight emerged, manifested in ECB's president Mario Draghi, and proclaimed on July 26th, 2012, his famous winged words "*whatever it takes*".

5.1. Quantitative Easing

He immediately set to work. He extended LTRO up to three years. Since the international financial market did not buy government bonds of Mediterranean countries at moderate interest rates, he resorted to a monetary policy of *quantitative easing*, that is he ordered the national central banks of ESCB to buy government bonds and other commercial papers by creating fiduciary central bank money. Hence, he flooded the member countries of the ESCB with cheap money which was but fiduciary money created by the ECB itself. For the purpose of avoiding violation of article 123, paragraph 1, of TFEU, prohibiting overdraft facilities or any other credit facility with the ECB or with the central banks of the member states, he ordered central banks to buy public bonds or other commercial papers exclusively via the financial market. Moreover, he used article 123, paragraph 2, to rationalize that the ECB acted "within the confines of its mandate" by hiding this move behind open market operations. Indeed, article 123, paragraph 2, allows open market operations, although in a cryptic formulation. But the notion of open market operations implies that securities are not held until maturity, but are bought and sold according to the needs of money supply of the economy. Hence, article 123, paragraph 2, TFEU, was misused, since the securities were not reimbursed at their maturity, but exactly replaced by other securities.[2]

In an expert *ultra vires*-judgment of May 5th, 2020, the German Federal Constitutional Court (Bundesverfassungsgericht) surmised that the ECB had overshot its authority and forbade the German Central Bank (Bundesbank) participating in the purchase of securities unless the ECB could prove commensurability of its policy within three months.[3] Indeed, the ECB submitted a statement, which was, however, declared as confidential so that it was detracted from verification by the public.

5.2. Zero and Negative Interest Rates and the TLTRO Subsidy

The ECB's next coup was to reduce the interest rate to zero which allowed the ESCB countries to raise credit for financing their public debt without any cost. This move proved to be disastrous for the banking and insurance sectors. Moreover, for deposits held by commercial banks with the ECB, it charged a negative interest rate of 0.5

[2] In this respect, ECB deviated from the practice of the FED.

[3] As I see it, this was imprudent. Rather the Constitutional Court should have immediately stopped participation in the purchase of securities and should have allowed its resumption only after a convincing statement of the ECB. About that I asked Professor Vosskuhle (then the president of the German Constitutional Court), but never received a response.

percent. First, the minimum reserves were exempted from this negative interest rate; later this threshold was increased to six times the minimum reserves. The ECB defended the negative interest rate as a kind of stick for inducing the commercial banks to grant more credits to the private sector. This sounds rather curious because it is the very business of commercial banks to grant credits. But the private sector had to face a glut of savings and low demand for credits. It seems to me that the true reason of a negative interest rate was creation of proceeds for the national central banks. Incidentally, the negative interest rate had the side effect that the commercial banks shifted money to financial markets outside the ESCB area which caused a devaluation of the Euro promoting European exports and impeding European imports.

Reacting to the complaints of the commercial banking sector about the negative interest rate, effective of June 24th, 2020, the ECB resorted to a trick based on the TLTRO III-program. It turned the negative interest rate of 0.5 percent upside down. TLTRO III offered commercial banks credits from the national central banks paying them a one percent interest rate. Even in case they entered this amount on their account with their appropriate central bank, although they had to pay the negative interest rate, could net a gain of 0.5 percent just for accepting money. But notwithstanding that, the commercial banks often charged their customers the EBC's negative interest rate of 0.5 percent. Thereby, they changed cost into profit. Hence, on balance, the commercial banks could reap a minimum profit of one percent just for accepting money. When they lent credits to their customers, they could reap additional profit. In the annual report of the German Bundesbank for 2021, p. 75, it is bewildering to find under the heading *refinancing* interest *expenses* (rather than interest *earnings*) of 4.003 billion Euro which reflected its present to the commercial banks. This is a remarkable example of fakes for refinancing.

5.3. ERF, ELA, ANFA

In addition to that, several ERFs had provided money for some countries of the European Union, especially Greece. The maturity of these credits extends often to several decades. Inflation helps to allay the burden of their eventual redemption.[4] All securities held by the ESCB, including the debts of the ERF, amount to some 4 trillion Euro (Sinn 2021, p. 337).

This is not the whole story. The ELA allowed national central banks to create ECB money on their own and grant credits on this basis. In addition of that, in 2014 the ANFA was accorded, allowing the national central banks to create ECB money on their own to acquire all kinds of assets as their property. The ANFA properties amount to 1.5 trillion Euro (Sinn 2021, p. 100).

5.4. TARGET

Moreover, there is the Trans-European Automated Real-time Gross Settlement Express Transfer System (TARGET). It was adopted to handle payments between national central banks of TFEU. From the introduction of the Euro in 2000 until the breakdown of Lehman Brothers on September 15th, 2008, the credit and debit balances between national central banks were largely settled.[5] Credits for imports of commodities and services were borrowed from the international financial market. After Lehman's collapse, participants in the international financial markets became extremely careful in guarding their money, and granted credits to risky countries – if at all – at very high interest rates. Mediterranean countries quickly realized the chance provided by TARGET and switched from the settlement of their balance of payments to unsettled credits. Rather than having immediately

---

[4] Greece alone received 278 billion Euro (Rose, 2022). These credits will be redeemed between 2034 and 2060. Given the prevailing inflation, its purchasing power will best be peanuts by this time. For other Euro Rescue Funds see Rose (2019).

[5] The former president of the Bundesbank, Helmut Schlesinger (2012) argued that, when negotiating TFEU, it had been tacitly presupposed that foreign-trade credit and debit balances were promptly settled.

stopped this malpractice, the ECB, particularly under the leadership of Mario Draghi, generously tolerated it. It is worth noting that debtor central banks enjoy a costless, unlimited, and non-callable credit. Nonetheless, inflation will further diminish the real value of the credit.

TARGET became also an instrument of capital flight from the Mediterranean countries to safer countries, particularly Germany and Luxembourg. All these sources of balance of payments deficits inclusive of capital flight established substantial debit balances mainly benefitting Italy (568.1 billion Euro by February 2022), Spain (516.8 billion Euro by February 2022), the ECB itself (352 billion Euro by October 2021), Greece (105.3 billion Euro by February 2022), and Portugal (77.5 billion Euro by February 2022). But then, substantial credit balances were accrued to the disadvantage of mainly Germany (1140.8 billion Euro by February 2022), Luxembourg (318.1 billion Euro by February 2022), Finland (96.5 billion Euro by February 2022), and Ireland (83.7 billion Euro by February 2022).[6] This is the main result of payment orders between commercial banks channeled through and carried out by ESCB. The TARGET balances of the national central banks of other countries within ESCB are more volatile.

"Target balances create open, uncollateralized credit positions that are in fact overdraft credit. There is no limit to this overdraft credit and no settlement mechanism" (Sinn 2020, p. 9). The ECB disputed the above view and considers TARGET balances as accounting items only, without connoting credit and debit relationships.[7] It claims that this is akin to the case of payments within the member countries of a federal state such as the Federal Republic of Germany. But this does not hold for the ESCB where its member states retained their sovereignty. This stance of the ECB provokes the question of whether a member country that leaves ESCB is obliged to repay its debt. Indeed, some Italian quarters took a fancy to this idea in the recent past, but – unexpectedly – were ordered back by Mario Draghi.

What are the consequences for a country whose national central bank has a sizeable and permanent TARGET credit balance? First, its credit can never be pulled in because TARGET accounts are never settled. Second, this kind of credit does neither bear nor cost interest. Third, inflation will erode the real value of the credit. Fourth, this kind of credit violates a sovereign country's most important democratic right – federal budgetary control. For instance, the German Parliament never by its own accord decided to grant a credit exceeding 1.1 trillion Euro to the ECB.[8] This is also true for other national central banks' countries with credit balances. The same applies to the forced purchase of public and commercial bonds of the national central banks by order of the ECB. Neither the Maastricht Treaty of February 7th, 1992, nor the TFEU envisaged and allowed deviation from ECB's primary objective – maintaining price stability. Whereas both the Maastricht Treaty and TFEU postulated the principle of *fiscal predominance over monetary policy*, the ECB, despite being devoid of democratic legitimacy, undermined this principle by *fait accompli* and enforced *monetary predominance over fiscal policy* instead.

In Section 2, I mentioned the members of the European Union which are not members of ESCB. When the introduction of the Euro was prepared, Denmark, Sweden, and the United Kingdom stood in the forefront of not introducing the common currency. Although in this early time the enthusiasm for the Euro was pervasive in the European Union, these countries might have suspected some difficulties with the common currency.[9] When (the less indebted countries) Bulgaria, the Czech Republic, Hungary, Poland, and Rumania later on joined the European Union, they were first eager to also become members of ESCB. But after Draghi's winged words "whatever it takes"

[6] All data from *Statista*.
[7] Interestingly, some mathematical economists share this view. For a survey of this controversy see Seidl (2020).
[8] To be correct, the cash balance (that is, the banknotes which were issued by the German Bundesbank and are in circulation in non-ESCB countries – kind of seigniorage wealth – amounting in 2019 to some 436 billion Euro) must be deducted. Its exact measurement is very complicated. For details see Sinn (2020, p. 26).
[9] It is remarkable that these countries were not much indebted. In 2000, the debt ratio of UK was 36.65 percent, for Denmark it was 52.35 percent (with declining tendency: in 2007 it was 27.35 percent), in Sweden it was 50.23 percent (with declining tendency: in 2007 it was 38.98 percent). On the contrary, in Italy it was 109.03 percent and in Greece 105.83 percent in 2000. For these data see *Statista*.

of July 26th, 2012, they gradually realized that, as members of ESCB, they must contribute to financing the budgetary and foreign trade deficits of the Mediterranean countries by way of TARGET. Hence, they lost interest in joining ESCB (see Blesse et al. 2018).[10]

5.5. Corona Reconstruction Fund

Finally, the European Union decided on the Corona Reconstruction Fund (CRF) on December 14th, 2020, by a so-called Own Resources Decision Ratification Act (for more details cf. Riedl 2021). Notwithstanding the ban of article 310 TFEU, the European Union for the first time ventured to take out a loan on the international capital market amounting to 750 billion Euro for the damage caused by the Corona Pandemic. Out of this amount, 390 billion Euro should be paid out as grants and 360 billion Euro as loans redeemable until 2058. The deadline of this project is 2026. Ignoring article 310 TFEU, this Own Resources Decision of the European Commission was based on article 311, paragraph 3, sentence 2, TFEU. Riedl (2021) argued: "However, according to Article 311 (3) sentence 2 TFEU, only the Union's *own* resources can be introduced. The applicants argue that borrowed funds are not the Union's own resources. However, according to the wording of the contracts, only the Union's own funds (*own* resources) and no external funds (*external* resources) could be raised." By this back-door, the European Commission introduced Eurobonds, ruled out by Article 311 TFEU. Hence, this problem comes up to a question of *ultra vires,* i.e., the European Commission exceeded its authority in a sufficiently qualified and structurally significant manner.

This problem caused a lawsuit to be filed to the German Federal Constitutional Court (Bundesverfassungs-gericht). According to the rules of TFEU, this judgment must be brought before the ECJ, which would most probably have confirmed the Own Resources Decision of the European Commission, since majority of judges is delegated by the Mediterranean countries. But, other than on May 5th, 2022, in its judgment of December 6th, 2022, the Bundesverfassungsgericht scared stiff of a judgment *ultra vires*. It rejected the suit because the Own Resources Decision *apparently* did not violate the provisions of TFEU. Since the only possible barrage against the Own Resources Decision had failed, the CRF will become effective, which means that the volume of fiduciary inflation will be reinforced. It is to be expected that ECB money will increase by another 750 billion Euro, because it is probable that most of these Eurobonds will be purchased by the ECB with newly created ECB money. This will reinforce fueling inflation.

6. Excessive Money Printing is the Catalyst of Inflation

Sections 4 and 5.4 showed us that the ECB commandeered predominance over democratically elected member countries of ESCB with respect to financial matters. It is quintessential to note that the ECB practices the creation of fiduciary money by hook or by crook. Section 5 on "rescuing" the Euro dealt with the many sources of ECB's fiduciary money creation.

Nota bene, creating fiduciary money by hook or by crook begets inflation unless the excess fiduciary money is neutralized. The ECB might object that inflation hovered around 2 percent until 2020 (Sinn 2021, pp. 258 and 358). But this does not imply that inflation was moderate before 2021; it had loomed behind at least since the Financial Crisis, because inflation was wrongly measured. The ECB measured inflation as the *consumer price index*. In normal times, competition among producers prevents increases in the prices of consumer goods. Hence, inflation, as measured in this way, remains modest. But capital goods obey a different régime. Land is scarce, real estate and common stock are scarce in the medium-term, and antiques and objects of art are scarce. Due to their fixed supply, prices will skyrocket whenever there is sufficient money supply and low interest rates. Real estate prices rose by

[10] Croatia entered ESCB as of January 1st, 2023. This move is possibly explained by much tourism in Croatia, which requires the Euro.

107 percent between 2008 and 2020 in middle German towns (cf. Sinn 2021, p. 344). This means that real estate prices rose by some 6.25 percent annually. Supposing that households spent about one quarter of their expenses on capital goods, this comes up to a realistic inflation rate of some 3.5 percent annually between 2008 and 2020.

What did become of the immense sums of fiduciary money which was created by the ECB? It was created by the ECB for financing the public sectors of the ESCB member countries, as Section 5 showed us. The public sectors of the ESCB member countries spent the money, which eventually wound up in their private sectors. The private sectors largely neutralized the money. It was particularly the commercial banks which neutralized the money in terms of deposits held with the ECB. The amount of currency in circulation plus the money held by commercial banks with the ECB is the *monetary base*, M_0. Because of the money-supply multiplier, M_0 is the potential powder keg of inflation (Sinn, 2021, p. 244).

Immediately before the breakdown of Lehman Brothers on September 15th, 2008, M_0 amounted to 876 billion Euro. By September 2021, it had increased to 5.99 trillion Euro.[11] This is a close to seven-fold increase within 13 years. This did not speed up inflation, since money was held by the private banks with the central bank, i.e., it was neutralized. However, consequential of supply shortage due to the breakdown of supply chains, the Corona Pandemic, and the Ukrainian War, the money deposits of the commercial banks with the ECB (which could multiply money supply by means of the money-supply multiplier) and the dissolution of the private monetary hoard caused a glut of money supply, which skyrocketed inflation.

Let us have a look at the German situation. Following *Statista* data, the financial assets of the private sector amounted to 4.09 trillion Euro in 2008, and in mid-April 2022 they amounted to 7.62 trillion Euro, which is an increase of 86.2 percent. The inflation rate, as measured by the consumer price index, did not exceed 2 percent. This is easily explained: the population enjoyed welfare in that the production capacity of consumer goods exceeded demand, which means that, whatever a consumer wanted, he or she could readily buy. Consumers were satisfied with that because consumption needs time which was destined enjoying the acquired consumption goods. Hence, the private sectors of ESCB countries did not spend major parts of their financial assets, thereby neutralizing much of the fiduciary ECB money. This tendency was reinforced by the Corona Pandemic.

But, as concerns their monetary policy, both ECB and FED barked up the wrong tree. They followed Keynesian-type models that consumption was insufficient and should be encouraged. Hence, they reduced the interest rate to zero percent and (in case of the ECB) inflicted even a negative interest rate of 0.5 percent to push up credit demand. But this did neither increase (measured) inflation beyond 2 percent, nor demand. Instead, the excess fiduciary money was neutralized. Insofar as capital goods were sold, it was the former owners who contributed to money neutralization.

In the second half of 2021, inflation began to rear its ugly head. Inflation, as measured by ECB, skyrocketed in Germany to 5.3 percent in December 2021, to 7.3 percent in March 2022, to 7.9 percent in May and August 2022, and to 10 percent in September and November 2022. In October 2022 it reached its peak with 10.4 percent inflation. The reason was that, consequently of the Corona Pandemic and lockdowns in several countries (mainly in China), many supply chains either broke down altogether, were blocked, or suffered from leakages in 2020. Since February 24th, 2022, this development was reinforced by the Ukrainian War and its consequential sanctions. This meant scarcity of raw materials, intermediate and finished products worldwide, which impeded production and heavily increased industrial producer prices. Hence, the assumption that, whatever consumers want, can be readily supplied, was shattered. Commodities became scarce and were rationed by increased prices which fueled inflation

[11] Cf. Sinn (2021, p. 109). I am using the Sinn data, because ECB Statistics, "Monetary development in the euro area: November 2022", does not indicate M_0, but starts only with M_1, which is the currency in circulation plus the deposits held with the commercial banks (exclusive of commercial banks' deposits held with the ECB). But this figure is misleading because it is not the pivotal point of M_0 for the money-supply multiplier as the powder keg of inflation.

in 2021. More affluent consumers could fall back on their neutralized monetary reserves and could afford maintaining their consumption standard. The less fortunate part of the population had to tighten their belts. The governments of the European countries tried their best to provide some relief to the poorest part of the population. This situation was aggravated in 2022 by needs of assisting Ukraine and Ukrainian refugees. The ECB's reaction was to continue creating fiduciary money by hook or by crook, as though a boney-thin man can gain weight by simply widening his clothes.

7. The Breakdown of Globalization Topped Out at Inflation

Recall what led to the Euro Crisis: after the introduction of the Euro the Mediterranean countries enjoyed low interest rates in the range of the German interest rates. But rather to seize the chance of getting rid of their big debts, they granted benefits to their populations and, thereby, considerably increased their debts. Disregarding the "no bailout clause" of Article 125 of TFEU the financial market readily financed the credit needs of the Mediterranean countries – until the worldwide Financial Crisis of 2007-2008. Then the international financial market became aware of the disproportional risks involved with the Mediterranean countries. Credits were no longer prolonged and no credits could be obtained aside from excessively high interest rates. In 2011 Mario Draghi stepped in and, by quantitative easing, ordered the ECB to finance the ESCB member countries with sizeable credits, basically at zero interest rates. Although their situation sprang from their irresponsible financial policy in the period 2000-2008, in 2011 there was immediate need to support them for "rescuing" the Euro. However, ECB's prolonged abidance at zero interest rate in connection with the 0.5 percent negative interest rate was ECB's capital error. Although it was all right having started after the Financial Crisis with zero interest rate, it should have been gradually raised in order to induce the Mediterranean countries adopting a responsible financial policy, replacing credit borrowing by taxation in accordance with less public expenditure. In excessive cases the European Union should not have shied away from letting a member country going bankrupt.[12] But, by financially pampering the Mediterranean countries, ECB paved their way of becoming boarders of the rest of the ESCB countries.

There is no doubt that the European Union owed its welfare to globalization. But globalization is irreconcilable with interrupted supply chains, pandemic, sanctions, and, particularly, with war. In such cases, inflation is unavoidable. However, the present European inflation is aggravated by perpetually financing the overspending of the Mediterranean countries. The international financial market would acquire public bonds of these countries only at conditions which would strangle them. Hence, the ECB is left over as the sole buyer of these public bonds. Thereby, the sound member countries of ESCB are permanently affected and inflation is topped out at high levels.

In a nutshell, one may well argue that this monetary arrangement was primarily organized for the benefit of the Mediterranean countries. It is a scheme meant to redistribute funds favoring the Mediterranean countries.[13] Otherwise, the ESCB might have long been dissolved. Again, the Mediterranean countries must be blamed for their

---

[12] Politicians do not learn from history. Otherwise, they would have made an example of Greece with its notorious misconduct and let it go bankrupt. Greek misconduct has a long experience. In his book on the history of the *Latin Monetary Union*, Willis (1901, p. 81) remarked: "It is hard to see why the admission of Greece to the Latin Union should have been desired or allowed by that body. In no sense was she a desirable member of the league. Economically unsound, convulsed by political struggles, and financially rotten, her condition was pitiable. Struggling with a burden of debt, Greece was also endeavoring to maintain in circulation a large amount of inconvertible paper. She was not territorially a desirable adjunct to the Latin Union, and her commercial and financial importance was small. …Thus Greece was a mere useless appendage to the monetary league." – Italy is only slightly better than Greece: on June 20th, 2022, Italy was rated at BBB by S&P, at Baa3 by Moody's, and at BBB by Fitch, which means *lower medium grade*. Greece was rated at *non-investment grade*. Germany, Luxembourg, and Switzerland were rated at AAA (S&P), Aaa (Moody's), and AAA (Fitch), which means *prime*. See: Wie kreditwürdig sind welche Staaten? (2022).

[13] The ECB resorted to this complicated method for concealing the true amount of the transfers of the economically sound countries to the economically inefficient countries to avoid triggering opposition of the sound countries.

irresponsible economic wastefulness.[14] In addition, this monetary arrangement tends to use inflation to dwindle the value of public debt. An inflation of two percent will reduce the real value of public debt to 54.55 percent after 30 years. An inflation rate of 10 percent will leave only 4.2 percent of the present purchasing power of the public debt after 30 years.[15]

The salient question is, who had to pay for ECB's big party? Anyway, one man's meat is the other man's poison. Firstly, there are countries whose central banks hold TARGET credit balances, mainly Germany, Luxembourg, Finland, and Ireland. Their claims are non-callable, bear no interest, and, due to inflation, are subject to gradual debasement. Moreover, they bear the risk of no redemption. Secondly, those people who saved for their old age are afflicted with a very low interest rate and substantial inflation whenever they save in bonds or savings accounts. It is true that they can eschew that by investing in real estate or shares, but when the prices of these assets are at their peak at the time of acquirement, the savers are endangered by the hazard of bubbles. Recall that the real estate bubble led to the Financial Crisis of 2007/08, and a stock market bubble led to the dot-com crisis of 2000. Since the bond and the insurance markets are in no way profitable because of a too low interest rate and considerable inflation, savers are forced to rely on real estate and stock markets. But then again, if bubbles eventually burst, savers would suffer losses.[16] Moreover, wealthy countries suffer from the inflow of flight capital. When wealthy people residing in Mediterranean countries had reservations about the efficiency of their domestic economy, they employ the TARGET mechanism for shifting their wealth to Northern European countries, predominantly Germany. Here, they acquire blue chips in exchange for fiduciary ECB money, which increases both the destination country's credit balance and the origin country's debit balance.

When focusing on the social classes which had to eventually pay for ECB's party, the rich social class drops out because it disposes of the means evading most dangers to its members' fortunes. The poor social class suffers from inflation and low pensions, aggravated by ECB's policy. But politics is eventually called in to prevent outright misery by resorting to social transfers. Hence, the main burden to pay for ECB's party rests with the middle class, particularly in Germany. This means that the ESCB will linger as far as this social class is ready to pay for ECB's party. But this time span will hardly ever end, since the ECB may well rely on people's widespread ignorance of monetary policy.

8. The Flaw of the European Monetary Union

History has shown that monetary unions carry the seed of decay (cf., e.g., Willis 1901). A monetary union should be the last step in a unification process rather than the first step. Reputed economists, e.g., Nobel laureate Milton Friedman, Martin Feldstein, and Robert Barro had warned that the Euro would turn out as a failure for Europe. It is amazing that it has survived more than two decades, notwithstanding that most protective legislation

---

[14] This also concerns non-ESCB countries. Huge sums of funds of the European Commission go also to Hungary, which is blamed by the European Parliament for its widespread corruption of Orbán and his entourage, and to Hungary and Poland for their considerable democratic deficits. Nowadays, both countries would not be accepted as members of the European Union. TFEU should be revised providing for the exclusion of member countries of the European Union which violate the terms of membership admission. Note that, according to Tagesschau of December 29th, 2022, Germany is an annual net payer of 25 billion Euro to the European Union.

[15] Leading politicians (lately even joined by the head of the German Council of Economic Experts) use to argue that present public borrowing will burden our children. This is grossly erroneous in view of a 10 percent inflation rate. Just about 4.2 percent of present borrowing will burden them after 30 years in terms of purchasing power. The much bigger difference will again burden the present generation. Also, the 100 billion Euro for the German military forces will shrink to 90 billion Euro of purchasing power when the (notoriously slow) military procurement administration is able to spent the money with a delay of only one year (which will be the exception rather than the rule).

[16] Judging the effectiveness of successive conservation of value only two data are crucial, viz. the date of acquisition and the date of realization.

against its misuse were violated.

Given the monetary nescience of the population, this is no mystery. In 1957, *The American Mercury* had attributed the following quote to Henry Ford Sr., "It is well enough that people of the nation do not understand our banking and monetary system, for if they did, I believe there would be a revolution before tomorrow morning." In our age, revolt against inconsistent policies of the ECB would not happen because people are largely illiterate concerning monetary policy. According to a survey on behalf of the Association of German Banks, 44 percent of youngsters between 14 and 24 years are unable to get the idea of the rate of inflation. Nearly two thirds of the interviewees do not understand ECB's responsibility, and 31 percent of them cannot explain what a stock is (cf. Blechner, 2022).

To grown-ups, Juvenal's Satire No.10, 78-81, applies: "…*Nam qui dabat olim imperium, fasces, legiones, omnia, nunc se continet atque duas tantum res anxius optat, panem et circenses."* (… the mob that used to grant power, high office, the legions, everything, curtails its desires, and reveals its anxiety for two things only, bread and circuses). Since food no longer plays a crucial role in the contemporary European Union, people's central focus are circuses, presently mainly competitive sports. Intriguingly, most people know all champions of important sports, but they are widely ignorant about the fate of their own fortunes. While many people protest Corona vaccination and lockdowns, there has never been even the slightest protest about ECB's monetary policy.

People's illiteracy with respect to economics is reflected among politicians. The German leading politicians had sacrificed the Deutschmark in exchange for the acceptance of the German unification by the leading European nations. But only Gorbachev's acceptance was the crucial factor for the German unification, and he generously agreed. Possible opposition of other European nations would have been swept away due to the upheaval in the GDR. Federal Chancellor Helmut Kohl had prided himself of having pegged down safeguards for monetary policy in the Maastricht Treaty and subsequently in TFEU, but these were largely circumvented by Mario Draghi and Christine Lagarde.

Note that there is only one powerful position in ESCB, viz. the presidency of ECB. All other members of the European Commission are under supervision of the heads of the governments of the member countries of the European Union, and the European Parliament has hardly any power. But the German Chancellor Angela Merkel did never succeed (if she ever tried) to fill the presidency of ECB with an outstanding financial expert such as Axel Weber or Jens Weidmann, both former presidents of the German Bundesbank. In the 21st century it seems that Germany had had only one leader with some economic intuition, viz. Gerhard Schröder with his *Agenda 2010*. Because of his sound (although austere) economic policy, he lost the elections on September 5th, 2005. Other leading politicians were either ignorant or disregarded the findings of economics.[17] But only conscious monetary policy would have prevented degeneration of ESCB into a transfer union.

Both FED and ECB had trivialized the dangers of inflation for years and reacted far too late when it occurred. Even then the ECB reacted sleepier than the FED. Beforehand, both were eager to encourage consumption rather than following a policy of sound interest rates. In particular, the ECB did not blame its amiss monetary policy, but the increase of the prices of raw materials instead for the recent high inflation. In that, ECB had failed to learn a lesson from Switzerland which faced the very same price increases of raw materials. Indeed, Switzerland succeeded in pressing average inflation in 2022 below three percent, since the Swiss Franc had considerably valorized. In times of the Deutschmark, Germany's economic position would have been similar. But ECB's monetary policy dragged Germany as well as other Northern European countries into the claws of inflation. Of course, part of the present inflation is caused by the breakdown of globalization, in particular supply chains, part is caused by the Corona

[17] Every freshman in economics learns *marginal cost pricing*, as established by Adam Smith, David Ricardo, John Stuart Mill, Carl Menger, Léon Walras, and William Stanley Jevons. Contemporary politicians, largely ignorant of basic economics, coined the term *merit-order-principle* instead.

Pandemic, in particular lockdowns, part is caused by the Ukrainian War, part is caused by European sanctions[18], and part – and not the smallest one – is caused by ECB's printing money by hook or by crook in the past and in the presence.

Let us compare two groups of countries. Using CEIC data, the public debt ratio for Lebanon was 150.6 in 2020, for Argentina it was 78.6 in March 2022, for Zambia it was 36.6 in 1919, and for Sri Lanka it was 99.5 in December 2021. All these countries are virtually bankrupt. Consider now Mediterranean countries. In Greece the public debt ratio was 189.3 in March 2022, in Italy it was 152.6 in March 2022, in Spain it was 117.7 in March 2022, and in Portugal it was 127.0 in March 2022. This latter group enjoys considerable welfare. This dichotomy between these two groups of countries results, first, from the Mediterranean countries belonging to the group of industrialized countries. But, second, it results from the ECB's creating fiduciary money by hook or by crook for financing the overspending of the Mediterranean countries. TARGET balances are hardly ever decreasing, the ERF are long-term credits whose values suffer from high inflation, and, as concerns quantitative easing, matured government bonds were simply replaced rather than pulled in. The Mediterranean countries benefit from the of the rest of the ESCB countries.

9. First Steps to Control Inflation

Eventually, the ECB had to react to the soaring inflation. In its meeting on July 21st, 2022, it confirmed the end of securities purchases and changed the interest rates for the main refinancing facility (Hauptrefinanzierungs-fazilität) from zero percent to 0.5 percent, for the marginal lending facility (Spitzenrefinanzierungsfazilität) from 0.25 percent to 0.75 percent, and for the deposit facility (Einlagenfazilität) from -0.50 percent to zero percent. This move did away with the negative interest rate and with zero interest rate for the main refinancing facility. In its meetings on September 8th, and on October 27th, 2022, the ECB increased its interest rates twice by 0.75 percent, and on its meetings on December 15th, 2022, and February 2nd, 2023, it increased its interest rates twice by 0.5 percent. Hence, the main refinancing facility was increased to 3 percent. But all four steps were far too late to control inflation. Indeed, ECB had overslept control of the imminent inflation expressing confidence that it will peter out in the next future. But the financial market was more clear-sighted. It factored in possible future steps of the ECB, so that within half a year the interest rates for mortgage loans skyrocketed from some 0.75 percent to about 3 percent.[19] Many couples had to abandon their dreams of an own house. Stock and bond prices diminished. Government bonds of Mediterranean countries, in particular Greece and Italy, were affected. They proved unsellable on the financial markets. Recently, Italian government bonds were rated at BBB (S&P), Baa3 (Moody's), and BBB (Fitch), which means lower medium grade. (cf. Wie kreditwürdig sind welche Staaten? 2022).

In reaction to that, the ECB passed the TPM (Transmission Protection Mechanism) program. This means that it changed its redemption program for matured government bonds. Recall that the ECB had replaced matured government bonds by the same amount of government bonds of the same variety. Under TPM the ECB does not only replace matured government bonds of, say Italy, but in excess of that, purchases more government bonds of overindebted countries. But, in order to discontinue overall purchases of government bonds, the ECB sells marketable government bonds of less indebted countries of the ESCB instead, primarily German bonds. In other words, ECB did not discontinue financial support for highly indebted countries, which is, of course, not covered by

[18] European sanctions of raw material imports from Russia damage Europe much more than Russia: Russia had produced its weapons already in the past and can salary its soldiers by simply printing Rubles. – In case Nordstream 2 would have been commissioned, and the three damaged pipes of Nordstream would have remained intact, the present inflation in Europe would have been considerably reduced, but this is an economic observation only. Politics dictated other considerations.

[19] Other than in US, where mortgage credits are granted with a floating interest rate, usual mortgage credit contracts in Germany are granted with fixed interest rates from five to fifteen years.

its mandate.[20] Rather it should have maintained price stability. But on its meeting on December 15th, 2022, the ECB announced that, starting in March 2023, it will discontinue full replacement of mature securities: on average, securities averaging to15 billion Euro per month shall not be replaced.

10. Conclusion

Concerning present inflation in the European Monetary Union, we can discriminate between necessary and sufficient conditions. While we analyzed the major instrumental sufficient conditions of inflation, there were two necessary conditions of inflation, first, expenses exceeded receipts, mainly in the Mediterranean countries, and, second, the ECB created fiduciary central bank money by hook or by crook. It was the sleepy reaction of the ECB which too long just watched ongoing inflation rather than taking steps to combat it. This makes it now difficult to capture inflation before long. It will be with us for a while. In other words: the ECB is the central actor of the inflation piece.

Funding Statement

This research received no external funding.

Acknowledgments

I am indebted to Gerd Hansen for many illuminating discussions and to Hans-Werner Sinn for his excellent books which greatly influenced my ideas.

Declaration of Competing Interest

The author claims that the manuscript is completely original. The author also declares no conflict of interest.

References

Blechner, Notker. (2022). “Riesige Bildungslücken beim Thema Geld.” *Tagesschau*, January 11th, 2022. https://www.tagesschau.de›thema›finanzwissen

Blesse, Sebastian, Annika Havlik, and Friedrich Heinemann. (2019). “Searching for a Euro Reform Consensus: The Perspective from Central and Eastern Europe.” *ZEW-Gutachten und Forschungsberichte.* Mannheim: ZEW - Leibniz-Zentrum für Europäische Wirtschaftsforschung. http://hdl.handle.net/10419/201191

CEIC Data on Public Indebtedness. Downloaded August 1st, (2022).

Deutsche Bundesbank. (2022). *Geschäftsbericht 2021*, Frankfurt am Main: Deutsche Bundesbank.

Feld, Lars Peter, Clemens Fuest, Volker Wieland, et al. (2022). “Das neue Kaufprogramm der EZB ist toxisch für die Währungsunion.” Munich: ifo Standpunkt 240.

Greenspan, Alan. (1966). “Gold and Economic Freedom.” in Ayn Rand’s *Objectivist Newsletter*; reprinted in: *Capitalism: The Unknown Ideal*, 1967, edited by Ayn Rand, pp. 101-107. New York: New American Library (Penguin).

Orwell, George. (1949). *Nineteen Eighty-Four, A Novel*. London: Secker & Warburg.

Riedl, Benedikt. (2021). “Corona Reconstruction Fund Stopped for the Time Being.” *European Law Blog, News and Comments on EU Law*. April 14th, 2021.

Rose, David. (2019). “Der Geldfluss in die Krisenstaaten.” *Tagesschau*. June 27th, 2019. https://www.tagesschau.de › wirtschaft › rettungspakete108

Rose, David. (2022). “Euro-Rettungspakete: So viel Geld floss nach Griechenland.” *Tagesschau.* August 28th,

[20] See Feld, Fuest, and Wieland (2022). In four meetings, the ECB had increased the interest rate to combat inflation. However, this aim is thwarted, whenever risky countries are cushioned against paying higher interest rates. Moreover, countries with solid financial policy, like Germany, must pay higher interest rates for their newly issued bonds. Circulating German bonds lost some of their value due to the interest-rate effect.

2022.https://www.tagesschau.de › rettungspakete-101
Schlesinger, Helmut. (2012). “The Balance of Payments Tells Us the Truth.” *CESifo Forum*, vol. 13 (special issue), pp. 11-13. http://hdl.handle.net/10419/166505
Seidl, Christian. (2020). “Die TARGET-Kontroverse.” *Wist – Wirtschaftswissenschaftliches Studium*. 49 (9): pp. 25-32.
Sinn, Hans-Werner. (2020). *The Economics of Target Balances*. Cham: Palgrave-Macmillan.
Sinn, Hans-Werner. (2021). *Die wundersame Geldvermehrung.* Freiburg, Basel, and Vienna: Herder.
Wie kreditwürdig sind welche Staaten? *Tagesschau,* June 20th, (2022). https://www.tagesschau.de › wirtschaft › ratings102
Willis, Henry Parker. (1901). *A History of the Latin Monetary Union*. Chicago: The University of Chicago Press.