The Past, Present, and Future of the Euro as an International Currency : Moving Beyond the COVID-19 Pandemic and Russia's Military Aggression in Ukraine **

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Abstract

Since its introduction in 1999 till the present day, the euro has maintained its position as the second most important international currency after the US dollar.

The most significant feature of the euro is the mismatch between fiscal sovereignty and monetary sovereignty, and the integration of Europe, which forms the foundation of the euro, provides some room for changes through deepening and regional expansion. Crises in the past have served as driving forces for integration. During the COVID-19 pandemic, the EU and its member countries, drawing lessons from the euro crisis, established frameworks for fiscal stimuli and realized the creation of the NextGenerationEU (NGEU) fund for economic recovery.

The European Central Bank (ECB) played a role in putting the brakes on the chain reaction of debt crises during the euro crisis and supporting fiscal stimuli during the COVID-19 pandemic. The number of countries that have adopted the euro has expanded from the initial 11 to 20 countries. Since 2018, there has been a growing emphasis on strengthening its role as an international currency.

The euro currently faces a security crisis in the form of Russia's military aggression against Ukraine, as well as the accompanying energy crisis. The euro has been utilized as one of the means for imposing sanctions on Russia. However, the shift in the EU's relationship with Russia, from interdependence to confrontation, does not provide a tailwind for bolstering its role as an international currency.

The current crisis could develop to become a source of concern regarding the sustainability of the euro, as well as become an opportunity for promoting deeper integration and expansion. On the policy front, enhancing defense capabilities, energy security, and economic security have become priorities, but there is little momentum towards significantly strengthening common financial resources in the same way that the region responded to the COVID-19 pandemic. There is also a risk that political confrontation may sharpen in response to energy crisis measures.

Unlike in its response to past crises, the ECB is now taking swift steps towards the normalization of monetary policy with a view to achieving its main objective of medium-term

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price stability and is even moving towards further tightening. The current ECB possesses tools to address the fragmentation caused by widening yield spreads, but there are limits to the role it can play in asymmetric shocks such as the energy crisis. Hence, there is a need for coordinated efforts at the political level.

As for the outlook, it is difficult to foresee Ukraine's EU membership and adoption of euro in the near future. However, the EU and the euro are likely to play significant roles in Ukraine's recovery. As shown by its efforts towards the realization of a digital euro, the EU is maintaining the policy of pursuing strategic autonomy by enhancing the international role of the euro.

Going forward, it is likely that repeated efforts will be made to reach the political agreements required to safeguard the euro and that the euro will strengthen its position as the key currency of Europe. On the other hand, with the retreat of globalization, the further expansion of the euro's international role beyond Europe is expected to be limited.

Even as the world becomes increasingly fragmented, the euro is likely to remain as the international currency that ranks second after the US dollar and surpasses the renminbi. However, the gap between the euro and the renminbi is likely to narrow steadily.

Keywords: International currency, key currency, European Union (EU), European Central Bank (ECB), Stability and Growth Pact (SGP), NextGenerationEU (NGEU), economic sanctions, financial sanctions, EU enlargement, enlargement of the euro area, open strategic autonomy, Central Bank Digital Currencies (CBDC)

JEL Classification: E58, E60, F02, F50, H63

I. Introduction

International currencies are those that serve the three fundamental functions of money – as a unit of account, a medium of exchange, and a store of value – in global trade and financial transactions (see Table 1).

Since the inception of the single currency in 1999, the European Central Bank (ECB)

Table 1: Three fundamental functions of money and the functions of international currency

Economic agents / Functions	Private agents	Public Agents (Monetary Authority)
Unit of account	Quote currency of commodities Invoicing currency	Anchor currency of exchange rate regimes
Medium of exchange	Payment currency Vehicle currency	Payment currency Intervention currency
Store of value	Investment/financing currency	Reserve currency

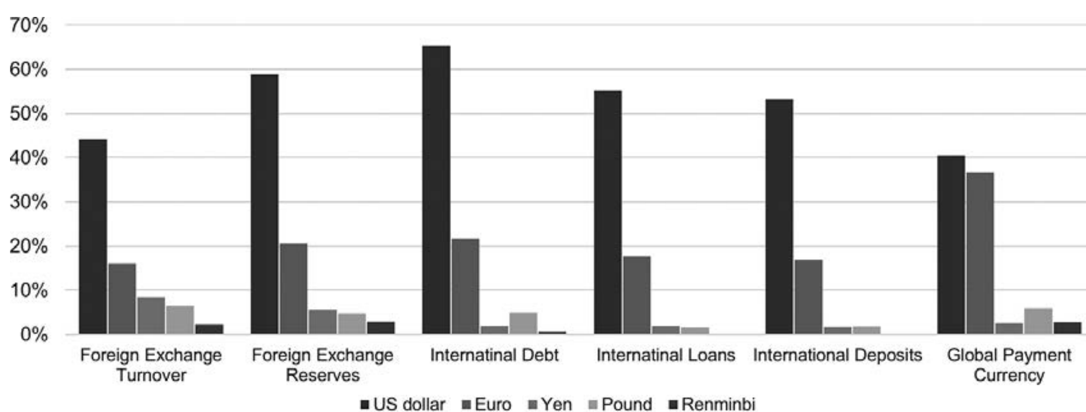
has annually published a comprehensive assessment (hereafter referred to as the euro report) to gauge the international status of the euro. The euro report confirms that the euro has maintained its position as the second most important international currency after the US dollar.

While the euro's rank as an international currency has remained stable since its introduction, its utilization has experienced fluctuations. According to an ECB index based on six indicators[1] of measuring its international role, the share of the euro increased steadily through the early 2000s, reached its peak in the mid-2000s, experienced a decline into the late 2000s, and has since stabilized with a slight reversal.[2] In the latest euro report, its utilization rate, adjusting for exchange rate valuation effects, is slightly above the level of its introduction.

It is noteworthy that the euro, while establishing itself as the second most important currency in the international monetary system after the US dollar, did not undergo significant changes to its status as a result of its introduction. This status was inherited primarily from the Deutsche mark, underscoring the temporary and limited impact of the euro's introduction on its international currency status.

A substantial disparity exists between the euro's role as an international currency and the US dollar's role as a key currency (Figure 1). The dollar benefits from historical "inertia" due to its role as a reserve currency under the Bretton Woods system and significant "network externalities" resulting from its widespread use.

Figure 1: The share of major currencies in the international monetary system



Note: Foreign exchange transactions total 200% recalculated as 100%.
Source: BIS Triennial Central Bank Survey, Global foreign exchange market turnover in 2019
ECB the international role of the euro, "June 2022-Statistical Annex"
SWIFT RMB Tracker, January 2022

[1] The shares of the euro in stock of bonds (narrowly measures, excluding home currency issuance), loans by banks outside the euro area to borrowers outside the euro area, deposits with banks outside the euro area from creditors outside the euro area, global foreign exchange reserves and global exchange rate regimes.
[2] ECB (2022b) p. 3, Chart 1.

Additionally, the US dollar meets all seven key characteristics observed in the history of dominant currencies listed by Claeys and Wolff (2020):

1. The large size of their economy (in terms of both GDP and international trade);
2. Free movement of capital;
3. The willingness of their public authorities to play an international role;
4. Their stability, at all levels: monetary, financial, fiscal, institutional, political and judicial (Including the rule of law and strong property rights);
5. Their ability to provide a large and elastic supply of safe assets;
6. The existence of developed – liquid and deep – financial markets;
7. Significant geopolitical and/or military power backed by a strong state.

The euro, however, lags behind the US dollar in terms of its ability to provide safe assets and the depth of its financial markets (criteria 5 and 6), two of these seven crucial attributes. This lag can be attributed not only to its restrected "inertia" and "network externality" but also to the euro's nature as an ambitious experiment in shared monetary sovereignty.

The euro's international role has faced challenges, particularly in the mid-2010s, as the global financial crisis and the euro crisis raised concerns about its stability (criteria 4). The European Union (EU) and the ECB only recently articulated a clear policy regarding their willingness to fulfill their role as an international currency in 2018 (criteria 3).

The euro's potential to close the gap with the US dollar depends on the ability not only to continue to fulfill criteria 1, 2 and 3, but also to implement the reforms in order to fulfill the other criteria.

Looking ahead, while the euro continues to strive to bridge the gap with the US dollar, the Chinese renminbi looms as a potential contender, and the euro's position as the second-important international currency after the dollar remains uncertain. China surpassed the euro area's economic size in 2018 and its military expenditure in 2014. Even within the broader EU, encompassing countries outside the euro area, China overtook EU military spending in 2020 and GDP in 2021. The United Kingdom's withdrawal from the EU in January 2020 accelerated China's ascent relative to the EU.

In spite of China's advantage in criteria 1 and 7, a significant gap exists between the international roles of the euro and the renminbi as shown in Figure 1. China's limited freedom of capital movement (criteria 2) hampers its ability to serve as a primary international currency.

The evolution of the euro's international status depends on various factors, including Chinese policies, international community responses, and developments within the European integration process, upon which the euro's role is predicated.

This paper aims to provide insights into the "future" of the euro as an international currency. Chapter II retraces the "past" of the euro, examining its characteristics as an international currency up to the response to the COVID-19 crisis. Chapter III evaluates the EU's response to Russia's invasion of Ukraine, particularly the utilization of the euro as a tool for

sanctioning Russia. Chapter IV addresses the “present” by analyzing the impact of environmental changes and policy responses to Russia’s invasion of Ukraine on the euro, comparing it with the past. Finally, in Chapter V, we engage in a discussion of the “future” of the euro.

II. The Past: Characteristics of the Euro as an International Currency

The euro, functioning as an international currency, possesses distinctive characteristics that set it apart both from the other global currencies. In this chapter, we delve into the euro’s feature from four key perspectives.

II-1. Fiscal-Monetary Sovereignty Mismatch and Deeper Integration

The most significant feature of the euro is the mismatch between fiscal sovereignty and monetary sovereignty. Countries that have adopted the euro have ceded their monetary policy authority while retaining control over their fiscal policies.

The introduction of the euro was envisioned as a permanent and irreversible step. Unlike a procedure for a member country to withdraw from the EU stipulated in article 50 of the Treaty on European Union (TEU), there are no provisions for a country to exit the euro area.

Nonetheless, concerns have persistently loomed over the viability of the euro. Even prior to its introduction, discussions surrounding the euro’s sustainability surfaced, with roots in the theory of Optimal Currency Areas (OCA), as initially discussed by Mandel.[3] A prevailing viewpoint suggests that the euro area extends beyond an OCA, lacking sufficient mechanisms to compensate for non-compliance with criteria for an OCA. Consequently, skepticism has endured, speculating that without fiscal and political integration, the euro might eventually face insurmountable challenges. Greece, a focal point of the debt crisis that spread in the euro area, raised concern over the exit from the euro area.[4] On January 1, 2023, Croatia adopted the euro and became the 20th member of the euro area. The euro area further extended beyond the boundaries of an OCA. The fact that the institutional framework of the euro to compensate for noncompliance with OCA criteria is still weak could lead to another round of euro crisis, and the resolution of such a crisis depends on the political will of sovereign states. Euroskepticism, rooted in the belief that national voters’ preferences do not necessarily align with support for a single currency, underscores these concerns.

Despite persistent doubts, European integration – the cornerstone of the euro – has deepened, often propelled by crises. Institutional reforms aimed at enhancing the euro’s stability have entailed greater devolution of national sovereignty and tighter restrictions. Differences

[3] See Mundell (1961) for details on the theory of OCA. De Grauwe (2020) presents previous research and other information on the scope of the OCA.

[4] Tanaka (2016) provides more detail on the development of the Greek crisis. Financial support was suspended for Greece following a referendum on the terms of support, and the ECB did not agree to the Greek Central Bank’s raising the ceiling on euro supplies to commercial banks. At the negotiations on the resumption of support, Germany was reportedly preparing a proposal for a temporary exit from the euro.

in positions and conflicts of interest among euro area countries, including those with high debt levels and those with strong fiscal positions, have surfaced. Nevertheless, last-minute agreements have been brokered to safeguard the euro, reflecting the substantial political investments made by these countries.

The debt crisis that swept through the euro area laid bare institutional deficiencies, such as an inadequate fiscal rule framework, a lack of support mechanisms, and disparate banking supervision and resolution systems within the currency bloc. To address these issues, fiscal rule revisions based on the Stability and Growth Pact (SGP),[5] which proved insufficient in preventing the debt crisis, were considered, leading to the establishment of the European Stability Mechanism (ESM). Additionally, single banking supervision and resolution systems were introduced, the euro area become the "banking union" based on a single rule book.

The rapid outbreak of the COVID-19 pandemic in March 2020 initially sparked concerns that it could escalate into a debt crisis. The first wave of the pandemic inflicted severe damage on heavily indebted countries like Italy and Spain. Although these countries were particularly vulnerable to the pandemic's economic impact due to their reliance on tourism, their limited fiscal leeway hindered their ability to mount effective policy responses. This, in turn, exacerbated economic distress and reignited concerns of a renewed financial and debt crisis.

However, the COVID-19 pandemic-induced resurgence of the debt crisis was avoided. While the crisis's distinct nature played a role, the lessons learned from addressing the euro crisis and subsequent institutional reforms proved valuable. Following the global financial crisis, premature fiscal austerity and delayed political agreements allowed the debt crisis to spread within the euro area.[6] In contrast, during the COVID-19 pandemic, a framework was swiftly established, facilitating necessary fiscal mobilization by EU member states. Notable measures included "rule flexibilization," permitting temporary exemptions from state aid rules, and invoking a temporary exemption clause for the SGP. These efforts culminated in a €540 billion crisis response package, featuring a €100 billion low-interest loan framework called "Support to mitigate Unemployment Risks in an Emergency (SURE)." The package encompassed the creation of a "Pan-European Guarantee Fund" by the European Investment Bank (EIB) expected to mobilize €200 billion in investments and the "Pandemic Crisis Support" within the ESM, valued at €240 billion. Temporary exemptions from state aid rules were estimated to provide approximately €3 trillion in liquidity support, equivalent to 20% of EU GDP, while activating the temporary exemption clause in the SGP would contribute €575 billion, or 4% of the same. Unlike the euro crisis, the ESM was not utilized, but the EIB's "Pan-European Guarantee Fund" was projected to stimulate €177.1 billion in investments. Moreover, SURE, financed by the European Commission, played a pivotal role, with

[5] In Ito (2021b), from the perspective of fiscal rules, the pre-euro crisis was referred to as "Fiscal Union 1.0" and the post-euro crisis as "Fiscal Union 2.0," and the problems of "Fiscal Union 1.0," the improvements and problems in "Fiscal Union 2.0" and the operation of fiscal rules in the COVID-19 crisis were discussed.
[6] The failure to respond to the euro crisis is discussed in Ito (2021a).

19 countries utilizing it to the tune of €98.4 billion, providing assistance to 31 million individuals and 2.5 million companies in 2020.[7] Notably, social bonds were issued, with the initial issuance in October 2020 garnering substantial interest in international capital markets.

Another significant stride was the agreement on NextGenerationEU (NGEU), an €806.9 billion (nominal amount) recovery fund, coupled with the €1.2 trillion Multiannual Financial Framework (MFF) for the EU budget spanning from 2021 to 2027. The creation of NGEU, slated to commence operations in 2021, constitutes a framework designed to support investments, reforms, and inclusive recovery from the COVID-19 pandemic, while promoting a green and digital transition. Detailed institutional design considerations are explored in a separate article[8] and will not be extensively discussed here. Nevertheless, several key points should be mentioned as a relevance to the euro's status as an international currency. Notably, the NGEU encompasses EU member states outside the euro area, and the bond issuance associated with the fund is conceived as a one-time framework set to extend until the end of 2026, with redemption slated for 2058.

Nevertheless, the NGEU has the potential to enhance the euro's standing in three crucial dimensions:

1. Strengthening of Safe Assets and Financial Markets

The financing of the underlying funds through EU-Bonds issued by the European Commission offers a substantial boost to the euro's profile, addressing two critical requirements outlined in Chapter I: the capacity to provide safe assets (criteria 5) and the fortification of financial markets (criteria 6). Moody's and Fitch both accord the European Commission their highest credit rating (stable outlook), while S&P assigns it the second-highest rating (stable outlook). Notably, German government bonds, the benchmark for the euro area's government bond market, enjoy the highest credit rating (stable outlook) across all three leading rating agencies. With a total outstanding amount of EUR 1.9 trillion as of the end of 2021. In terms of outstanding government bonds,[9] France is the largest issuer in the euro area (EUR 2.5 trillion), possessing the third-highest credit rating. Italy follows France with EUR 2.2 trillion in outstanding government bonds, yet it grapples with a credit rating of Baa3 (stable outlook) by Moody's and BBB (stable outlook) by Fitch and S&P, barely attaining an investment-grade status and registering one of the lowest ratings among EU member states.[10]

The issuance size of approximately EUR 800 billion in EU-Bonds for the NGEU carries substantial impact. Notably, 30% of these bonds are earmarked as green bonds. In recent years, the EU has strategically wielded its influence as a global rule-maker strengthened through the process of forming the single market.[11] With aspirations to lead in decarboniza-

[7] European Commission (2023) p. 13.
[8] Ito (2021b).
[9] Based on European Commission Statistics Directorate (Eurostat) Government consolidated gross debt at face value - Debt securities. There are two other countries in the euro area besides Germany that have the highest rating from the three rating companies, however outstanding amount of government bonds of both countries are limited (the Netherlands: EUR 372.7 billion, Luxembourg: EUR 14.2 billion).
[10] Only two countries, Cyprus and Greece, are currently rated lower than Italy in the euro area.

tion and rule-making, Europe, while lagging behind the United States in overall capital market development, liquidity, and depth, holds a significant advantage in the sustainable finance sector. Bonds from the NGEU and SURE bonds are poised to emerge as benchmarks in the sustainable finance market, further fueling its growth.

2. Advancing Common Financial Resources

The NGEU represents a significant stride in enhancing the EU's shared financial resources. Comprising grants amounting to EUR 421.1 billion and loan facilities totaling EUR 385.8 billion, the fund diversifies the EU's financial toolbox. Prior to the fund's establishment, the EU bonds, including SURE bonds, raise financial resources for loans. Repayments from countries using these loans constituted the source of redemption. To ensure the bonds' high rating, the EU budget guaranteed them in case of repayment defaults by the borrowing countries.

In contrast, a portion of the EU-Bonds financing the NGEU for grants will be repaid by the EU budget. To back the borrowing, retain its high credit rating and raise funds under favorable market conditions, the EU uses the EU budget and its headroom. To ensure sufficient headroom for the NGEU borrowing, the EU has increased the Permanent 1.4% Own Resources Ceiling of its budget by 0.6 percentage points of the EU's Gross National Income (GNI).

3. Promoting Structural Transformation and Reducing Disparities

The allocation of subsidies within the NGEU is expected to drive structural transformation while curbing intra-regional disparities, thereby addressing the stability challenge (Chapter I) that came into question during the euro crisis. The core component of the NGEU, the Recovery and Resilience Facility (RRF), amounting to EUR 723.8 billion, reserves EUR 385.8 billion within the loan facility, capped at a maximum of 6.8% of GNI of the recipient country. In contrast, EUR 338 billion in grants will be distributed to countries with low-income, high unemployment rates, and those most severely impacted by the COVID-19 pandemic.

The grant distribution is expected to be particularly concentrated in Southern and Central and Eastern European countries, thus mitigating regional disparities. Countries utilizing the RRF are obligated to formulate a recovery and resilience plan. These plans must adhere to specific requirements, including dedicating 37% of the total allocation to green transition initiatives addressing climate change and 20% to digital transition. After review by the Commission and approval by the Council, member states receive an initial advance payment equivalent to 13% of their plan's value. Subsequent funding can be requested based on the plan's progress, reviewed by the Commission, and disbursed upon unanimous approval by the Economic and Monetary Affairs Committee.

As elucidated above, the comprehensive framework underpinning the bold fiscal expansion amid the COVID-19 pandemic prevented unemployment and its lingering repercussions, while also facilitating structural transformation and mitigating regional disparities.

[11] Bradford (2020) has more on the EU as a global rule-maker.

This nexus of measures fosters confidence and further advances integration, building upon lessons from the euro crisis.

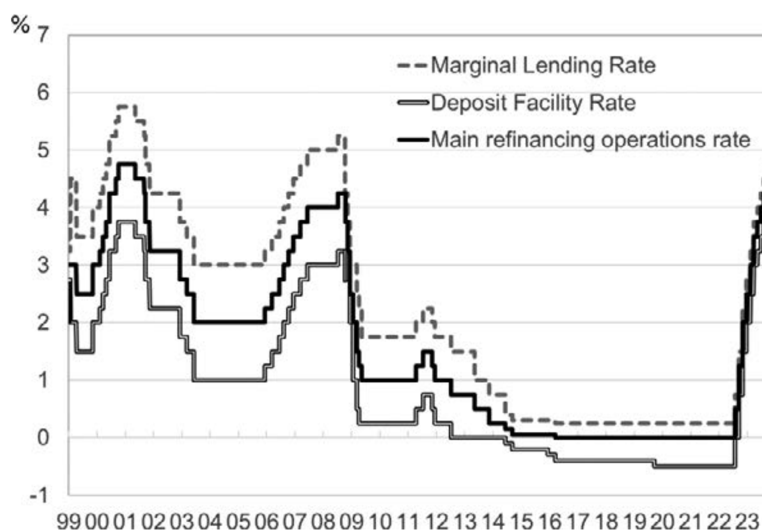
However, the recovery process following the COVID-19 pandemic was disrupted by the Russian invasion of Ukraine, introducing an unexpected dimension. The responses initiated in the wake of the invasion are detailed in Chapter IV-1.

II-2. The ECB as Guardian of the Euro

The ECB plays a pivotal role in shaping monetary policy within a single currency area that retains decentralized fiscal sovereignty. The Treaty on the Functioning of the European Union (Article 127 of the TFEU) stipulates that the “primary objective” of the European System of Central Banks (ESCB) is to maintain “price stability.” Without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the EU.

In response to the global financial crisis, the ECB initiated substantial interest rate reductions (Figure 2) and provided liquidity support. As the debt crisis spread within the euro area, the ECB introduced an array of non-standard policy measures to address the situation. In May 2010, the ECB introduced the Securities Markets Programme (SMP) to counteract the widening yield disparities stemming from the debt crisis. Subsequently, in September 2012, the ECB launched a program involving unlimited government bond purchases, contingent upon the implementation of the ESM support program. This program was known as Outright Monetary Transactions (OMTs). The introduction of OMTs marked a milestone and was underscored by then-President Mario Draghi’s assertion at the City, which serves as a hub for euro trading. He declared that “Within our mandate, the ECB is ready to do whatever it takes to preserve the euro.” This commitment, coupled with the introduction of

Figure 2: Key ECB interest rates



Source: ECB

OMTs, is widely recognized as having quelled the chain of debt crises within the euro area.[12]

Subsequently, in response to the aftermath of the debt crisis, characterized by sluggish growth and deflationary threats, the ECB maintained and reinforced its accommodative monetary policies. In June 2014, it initiated a negative interest rate policy, setting the deposit facility rate as negative. Alongside purchases of covered bonds and asset-backed securities (ABS), the Public Sector Purchase Programme (PSPP) was introduced as part of the Asset Purchase Programme (APP) in March 2015, marking the commencement of large-scale quantitative expansion.[13]

Furthermore, the ECB progressively lowered negative interest rates in September 2014, December 2015, and March 2016. Although new purchases under the APP were suspended at the end of 2018, the Governing Council, the main decision-making body of the ECB, decided in September 2019 to reinstate the APP and the first deepening of negative rates in three and a half years.

In addition to these measures, the Targeted Longer-Term Refinancing Operations (TLTRO) were rolled out in multiple phases to stimulate lending: TLTRO I, spanning from September 2014 to June 2016; TLTRO II, succeeding it from June 2016 to March 2017; and TLTRO III, introduced in September 2019.

Even prior to the COVID-19 pandemic, the ECB was navigating towards increased easing, struggling to find an exit from its ultra-monetary easing stance. However, in response to the pandemic, it intensified its easing measures and played a pivotal role in supporting bold fiscal policies. At the heart of the pandemic response is the Pandemic Emergency Purchase Programme (PEPP), which offers greater flexibility in asset purchases compared to the existing PSPP. It was launched in March 2020 and amounted to €1.7 trillion by the end of March 2021. In contrast, the APP, operational prior to the pandemic, had purchased EUR 3.3 trillion, primarily in government bonds, before being suspended on July 1, 2022. On the refinancing operation, TLTRO III, initially scheduled to run from September 2019 to March 2020, was extended due to the pandemic, and its utilization was incentivized by raising the maximum lending limit and easing the conditions for preferential interest rates.[14] Consequently, a total of €2.3 trillion was disbursed during the eight rounds implemented between March 2020 and December 2021.

Following the pandemic response, the ECB's balance sheet reached its peak at €8.8 trillion by the end of June 2021 (Figure 3). Notably, the pandemic response accounted for nearly half of this increase, resulting in the ECB's balance sheet expanding by a factor of 6.6 compared to its January 2008 level.

Thus, since the global financial crisis, the ECB's monetary policy exhibited a consistent

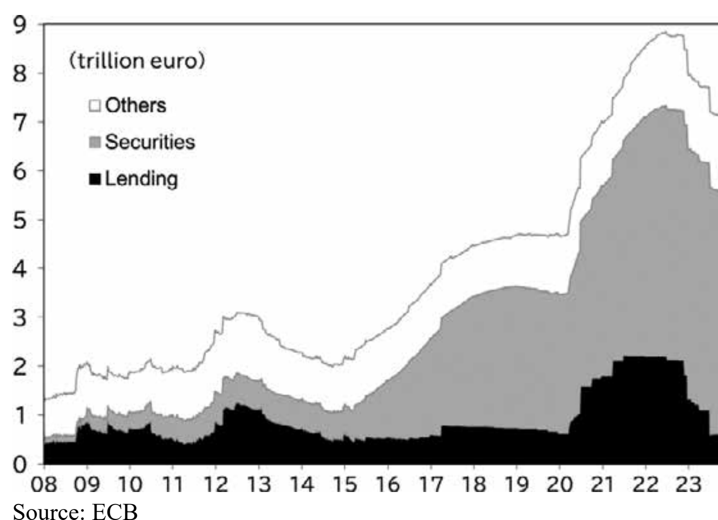
[12] Verbatim of the remarks made by Mario Draghi at the Global Investment Conference in London on 26 July 2012. As an assessment of the turning point of President Draghi's remarks in later years, Mike Bird and Christopher Whittall, "The Speech That Transformed European Markets-Five Years Later," The Wall Street Journal, 27 July 2017.

[13] The SMP was a credit easing measure, sterilized to absorb liquidity without affecting monetary policy.

[14] Borrowing rates in these operations can be as low as 50 basis points below the average interest rate on the deposit facility over the period from 24 June 2020 to 23 June 2022, and, if applicable, as low as the average interest rate on the deposit facility during the rest of the life of the same operation.

tendency towards greater accommodation until the close of 2020. However, shifts in the geopolitical landscape, most notably Russia's invasion of Ukraine, compelled the ECB to swiftly reverse course and begin scaling back its monetary easing measures. This juncture is explored further in Chapter IV-2.

Figure 3: Outstanding amount of consolidated assets of the eurosystem



Source: ECB

II-3. Enlargement of the Euro Area

One distinctive characteristic of the euro as an international currency is its potential for enlargement. This enlargement could have several implications, including the size of the economies (criteria 1), the ability to provide safe assets (criteria 5), and the amplification of geopolitical and military power (criteria 7). However, it also carries the risk of destabilization (criteria 4).

The introduction of the euro is contingent on an assessment of conformity with the Convergence Criteria outlined in Article 140 of the TFEU. When the euro was first introduced in January 1999, it was adopted by 11 countries. Greece, initially failing to meet the Convergence Criteria, eventually joined in 2001. Subsequently, Slovenia, an EU member following the eastern enlargement, adopted the euro in 2007. Cyprus and Malta followed suit in 2008, Slovakia in 2009, Estonia in 2011, Latvia in 2014, and Lithuania in 2015. By January 2023, a total of 20 out of the 27 EU member states had introduced the euro.

Of the seven remaining non-euro area countries, six are obligated to adopt the euro, with Denmark being the exception. Denmark, having joined the EU prior to the euro's introduction, retains the right to opt-out.

At least once every two years, or at the request of a member state with a derogation, the Commission and the ECB produce a "Convergence Report" that evaluates compliance with

Convergence Criteria consisted by (1) compatibility of legislation, (2) price stability, (3) public finances (the sustainability of the government financial position), (4) exchange rate stability, and (5) convergence of long-term interest rates.[15]

The June 2022 convergence report, displayed in Table 2, recognized Croatia's achievement in fulfilling the Convergence Criteria, making it the most recent EU member state to do so. Croatia had joined the European Exchange Rate Mechanism II (ERM II) in July 2020, as part of preparations to meet the exchange rate stability criteria "the observance of the normal fluctuation margins provided for by the exchange rate mechanism of the European Monetary System, for at least two years, without devaluing against the euro." Consequently, the decision was made to introduce the euro from January 2023. Following this decision, credit rating agencies S&P and Fitch upgraded Croatia's credit rating from BBB- to BBB+ (both with a stable outlook), while Moody's assigned a Baa2 rating (with a stable outlook). This further solidified its "investment grade" status, as rated by agencies Fitch and S&P (BBB- or above), and Moody's (Baa or above). Notably, smaller and less creditworthy countries often benefit from the introduction of the euro due to the resulting credit enhancement.

Bulgaria is expected to follow Croatia in adopting the euro. Bulgaria, an EU member since 2007, has maintained a fixed exchange rate system with the euro since 1999, making the transition to the euro relatively low-cost in terms of relinquishing monetary and currency policy authority. Bulgaria entered ERM II in July 2020, the same month as Croatia, and is in the preparatory stage for adopting the euro. However, in a June 2022 report, Bulgaria was found non-compliant in terms of Convergence Criteria 1 and 2. It holds credit ratings of BBB from Fitch, BBB from S&P, and Baa1 from Moody's. Fitch upgraded its outlook to "positive" in February 2021, citing progress towards euro adoption. The government had intended to introduce the euro in January 2024, but later changed its plans to January 2025.

Romania, another country with a strong incentive to introduce the euro, holds credit ratings of BBB- from both Fitch and S&P and Baa3 from Moody's, just below investment grade. However, there is still substantial work ahead before Romania can introduce the euro, as it did not meet any of the five Convergence Criteria in the June 2022 report. The government aims for euro adoption by 2024,[16] though realization is expected in the late 2020s.

In contrast to the countries making progress towards euro adoption, Poland, the Czech Republic, and Hungary have not set specific target dates. A European Commission public opinion survey conducted in April 2022 regarding the timing of introduction of the euro in these three countries indicated the lowest proportion favoring "within five years," while "within ten years" was the most common response in Hungary (46%) and Poland (37%).[17] This suggests an awareness of future euro adoption. The Czech Republic had the highest proportion favoring "within ten years" at 38%, but "never" also accounted for 36%, reflect-

[15] European Commission (2022b) pp. 5-8. note that Article 140 of the TFEU requires that, in addition to (1)-(5), "other factors" relating to economic integration and convergence should also be taken into account.
[16] European Commission, Romania and the euro (last accessed 14 November 2023).
[17] European Commission (2022c) p. 29.

Table 2: Overview table of economic indicators of convergence

		① Legistration	②Price Stability		③Government budgetary developments and projections				④Exchange Rate			⑤Long-term Interest Rate	
			HICP	Fulfilment	Country in Excessive Deficit	General Goverment surplus (+)/ deficit (-)	General government debt	Fulfilment	Participating in ERMⅡ	Exchange rate vis-à-vis the euro	Fulfilment	average	Fulfilment
Bulgaria	2020		1.2			-4.0	24.7			0.0		0.3	
	2021	×	2.8	×	No	-4.1	25.1	○	Yes	0.0	○	0.2	○
	2022		5.9			-3.7	25.3			0.0		0.5	
Czech	2020		3.3			-5.8	37.7			-3.1		1.1	
	2021	×	3.3	×	No	-5.9	41.9	○	No	3.1	×	1.9	○
	2022		6.2			-4.3	42.8			3.9		2.5	
Croatia	2020		0.0			-7.3	87.3			-1.6		0.8	
	2021	○	2.7	○	No	-2.9	79.8	○	Yes	0.1	○	0.4	○
	2022		4.7			-2.3	75.3			-0.2		0.8	
Hungary	2020		3.4			-7.8	79.6			-8.0		2.2	
	2021	×	5.2	×	No	-6.8	76.8	○	No	-2.1	×	3.1	×
	2022		6.8			-6.0	76.4			-3.1		4.1	
Poland	2020		3.7			-6.9	57.1			-3.4		1.5	
	2021	×	5.2	×	No	-1.9	53.8	○	No	-2.7	×	1.9	×
	2022		7.0			-4.0	50.8			-1.5		3.0	
Romania	2020		2.3			-9.3	47.2			-2.0		3.9	
	2021	×	4.1	×	Yes	-7.1	48.8	×	No	-1.7	×	3.6	×
	2022		6.4			-7.5	50.9			-0.5		4.7	
Sweden	2020		0.7			-2.7	39.6			1.0		0.0	
	2021	×	2.7	○	No	-0.2	36.7	○	No	3.2	×	0.3	○
	2022		3.7			-0.5	33.8			-3.0		0.4	
Reference Value			4.9			-3.0	60.0					2.6	
Denmark	2021	×	1.9	○	No	2.3	36.7	○	Yes	0.2	○	-0.06	○

Source: ECB (2022a) p. 44, Table 3.1 (partially modified by author).

ing a higher level of euro-skepticism compared to other Central and Eastern European countries. The Czech Republic possesses the highest credit rating among these three countries and has less need for credit enhancements. The reluctance to adopt the euro in these countries may stem from perceived difficulties in realizing the benefits of euro adoption while readily perceiving the costs of reduced policy flexibility.

The two remaining Nordic countries, Sweden and Denmark, have not adopted the euro. Both countries boast top credit ratings and do not require euro adoption for credit enhancement. Sweden has met the Convergence Criteria 2, 3 and 5 as of the June 2022 assessment. Nevertheless, since rejecting euro adoption in a 2003 referendum, Sweden has not taken preparatory steps, such as harmonizing legislation (Convergence Criteria 1) and participating in ERM II (Convergence Criteria 4), and remains a non-euro area EU member state. Public opinion on the timing of euro adoption varies, with "within five years" accounting for 9%, "within ten years" for 38%, and "never" being the most common response (51%) among the three options.

Denmark, not subject to the report on Convergence Criteria achievement due to its opt-out right, has not conducted public opinion polls regarding euro adoption by the EU. However, having joined ERM II in 1999 in preparation for euro introduction and adopting a fixed exchange rate system with a 2.25% fluctuation band against the euro, Denmark fulfills all conditions except compatibility of legislation (Convergence Criteria 1) and could swiftly adopt the euro with the requisite political will.

Public opinion polls in countries yet to adopt the euro reflect concerns about euro introduction, such as potential price increases, loss of control over the economy, and a perceived loss of national identity.[18]

In any case, the expected enlargement of the euro area in the near future is unlikely to significantly bolster the euro's international status, as it primarily involves smaller countries with lower creditworthiness. Furthermore, the risk of undermining stability (criteria 4 of the dominant international currency) is considered limited, given that the expansion resulting from Croatia's euro introduction would represent only 0.5% of GDP and 1.2% of the population. Even with the potential addition of Bulgaria, the increase would amount to just 1.0% of GDP and 3.2% of the population.

II-4. Political Will to Strengthen the Euro's International Role

The introduction of the single currency, the euro, was initially perceived by some as a challenge to the dominant position of the US dollar. However, it is more apt to view the euro's introduction as an extension of efforts to establish a single market and stabilize exchange rates, particularly within the context of capital liberalization.[19]

Initially, the EU maintained a largely "neutral" stance on the international role of the

[18] European Commission (2022e) pp. 31, 35-36.
[19] Konoe (2020) p. 99.

euro. However, in 2018, a shift towards a more proactive approach occurred. In December of that year, the European Commission authored a policy paper titled "Towards a Stronger International role of the euro."[20] Simultaneously, the Euro Summit expressed its commitment to supporting initiatives aligned with the policies outlined in the document.[21]

The Commission's policy document highlights the potential to develop the euro's international role in tandem with its political, economic, and financial significance. It emphasizes that an enhanced international role for the euro would not only safeguard the interests of citizens and businesses but also promote European values and economic prosperity. Moreover, it would contribute to a more resilient global economy, reducing vulnerability to shocks associated with a single dominant currency, while reinforcing a balanced, rules-based international political and economic order.

A key strategy for bolstering the euro's position entails the completion of an Economic and Monetary Union (EMU). This includes initiatives to progress towards completion of the banking union and the capital markets union. Additionally, other avenues were explored, such as advocating for the use of the dollar's de facto monopoly in sectors like energy, raw materials, food commodities, and transportation (e.g., aircraft, ships, and railways).

Even the ECB, in its annual euro report, initially maintained a "neutral" stance regarding the euro's international role, emphasizing that it primarily depended on market forces.[22] However, this stance evolved, aligning with the European Commission's goal of expanding the euro's global role, as reflected in its report.[23]

The shift in stance observed in 2018 was catalyzed by significant changes in the global environment affecting the EU. Notably, the UK's decision to exit the EU in a 2016 referendum, followed by a move towards a "Hard Brexit," posed the challenge of dealing with the departure of Europe's largest financial market, where a significant volume of euro transactions implemented. Furthermore, relations between the EU and the US deteriorated during the Trump administration, characterized by an "America-first" approach. Simultaneously, the EU became more cautious in its interdependence with China, given China's assertiveness and growing economic influence within the EU's single market.[24]

The shifts in perception regarding the ECB's role as a monetary authority are summarized in the discussion on "The benefits and costs of the international role of the euro at 20," presented in the 2019 euro report.[25] In its early years (1999), the benefits of international currency use included "Seigniorage," "lower transaction and hedging costs," and "lower external financing costs (Exorbitant privilege)." Meanwhile, the perceived costs included "blurred monetary aggregate signals" and "capital flow volatility." In 2019, the benefits related to monetary policy evolved to include "greater monetary policy autonomy," "Stronger international transmission of monetary policy with positive spillbacks," and "Lower pass-

[20] European Commission (2018).
[21] Euro Summit meeting (14 December 2018) statement.
[22] ECB (2018) p. 2.
[23] ECB (2019) p. 2.
[24] Ito (2022) p. 98.
[25] ECB (2019) pp. 38-44.

through reduces impact of FX shocks on CPI." Additionally, a benefit beyond monetary policy included the "Reduced exposure to unilateral decisions from third countries." This shift in perception reflected an awareness of the challenges Europe faced due to the US' increased use of financial sanctions and unilateral withdrawals from international agreements, such as the Iranian nuclear deal. On the other hand, the drawbacks, once perceived as costs, were reassessed to include "Stronger exchange rate in global stress episodes (Exorbitant duty)" and "lower effects of monetary policy on import prices." Strengthening the international role of the euro aimed to bolster its independence from the influence of US policies.

With the advent of President von der Leyen's Commission in December 2019, the emphasis on the EU's international role gained further momentum. The Commission, characterized as a "geopolitical Commission," placed significant importance on the EU's role in global affairs. In January 2019, the Commission issued "The European Economic and Financial System; fostering openness, strength, and resilience" as a policy document following up on the 2018 report mentioned above. This document identified "promoting the international role of the euro" as one of three pillars for building and strengthening the EU's open strategic autonomy.[26] The other two pillars focused on "strengthening the financial market infrastructure" and "improving the implementation and enforcement of EU's sanctions." The sentence used such as "The EU has a vital role in shaping the system of global governance and developing mutually beneficial bilateral relations, while protecting itself from unfair and abusive practices" reflects an increased awareness of the need to counter authoritarian states and safeguard European interests.

In the aftermath of the COVID-19 pandemic, the emphasis on enhancing the international role of the euro gained further prominence. It became a pivotal element of the EU's strategy for open strategic autonomy, designed to address evolving global challenges and changes in the international landscape.

III. The Present (1): Russia's Invasion of Ukraine and Economic and Financial Sanctions

The euro currently faces a security crisis in light of Russia's invasion of Ukraine and an associated energy crisis. The EU perceives Russia's actions as not only a grave security threat but also a challenge to the fundamental values that underpin the EU. Since Russia's annexation of Crimea in 2014, the EU has consistently imposed economic sanctions on Russia. However, the recent large-scale military invasion has prompted a significant expansion and intensification of these sanctions.[27] These measures, aligned in the West, have been incrementally broadened to respond to the prolonged aggression and escalating military ac-

[26] European Commission (2021a) p. 1. "Open strategic autonomy" is the model presented in the May 2020 policy document (European Commission, 2020, p. 13), which outlines the policy response to the COVID-19 response. European commission also presented a trade strategy for "Open strategic autonomy" in May 2021 (European Commission, 2021b).

[27] The full list of measures are summarized by the European Commission as a "sanction adopted following Russia's military aggression against Ukraine."

tions.

Furthermore, the EU has imposed financial sanctions on Russia, making use of the euro's international status as a tool. This shift from an interdependent relationship with Russia, particularly in the energy sector, to a situation of mutual sanctions and countermeasures inevitably impacts the euro's role as an international currency. The following sections examine the details and implications of these sanctions.

III-1. EU Economic and Financial Sanctions against Russia

The Western advantage over Russia primarily lies in its technological prowess, the international acceptability of its currency, and the depth of financial markets. Thus, Western sanctions to use technological prowess as leverage are prohibition on exports of dual-use goods and technology for military use, semiconductors and other technology-intensive goods.

On the energy front, in addition to the prohibition on imports from Russia of oil and coal, exports to Russia of goods and technologies in the oil refining sector or new investments in the Russian energy and mining sector have been implemented.

The financial sanctions were expected to be effective because almost all of the countries with major international currencies participated. The sanctions consisted of a ban on transactions with the Russian central bank, a ban on the Society for Worldwide Interbank Financial Telecommunications (SWIFT) for Russian banks, and restrictions on access to Russian capital and financial markets and so on.

At present, the conflict resulting from Russia's invasion of Ukraine appears to be protracted. Russia has sought to employ food and energy as instruments of influence, attempting to pressure the West into lifting sanctions. Nonetheless, Western countries, deeply concerned by Russia's use of force, violations of international laws, and human rights abuses, have remained steadfast in their support for Ukraine. Solidarity with Ukraine is particularly pronounced in Central and Eastern European nations, the Baltic States, and Northern Europe, which perceive Russia as a significant threat. There is a prevailing sentiment that Russia's unilateral military aggression and atrocities should not lead to any form of victory.[28]

An early ceasefire seems unlikely, and even in the event of one, the premature lifting of sanctions against Russia appears improbable. The process of disentangling the interdependence between the EU and Russia is anticipated to continue.

III-2. Russia's De-Dollarization and Euro-Renminbi Orientation

President Putin's invasion of Ukraine could have been based on a series of miscalculations. It is highly possible that Russia underestimated the EU-US partnership over financial sanctions. After the annexation of Crimea, Russia had shifted from the US dollar to the euro

[28] Ivan Krastev and Mark Leonard (2023).

and the renminbi.

As of January 1, 2022, immediately before the invasion of Ukraine, Russia held a significant portion (33.9%) of its foreign exchange reserves in euros. This allocation was notably higher than its holdings in renminbi (17.1%) and US dollars (10.9%). It is worth noting that as of the end of June 2017, the US dollar had the largest share (46.3%) in Russia's reserves. However, a year later, by the end of June 2018, this share had substantially decreased to 21.9%. This shift reflects the necessity for Russia to reevaluate its foreign exchange reserves as a defense against the potential imposition of further sanctions, particularly following the inauguration of the Trump administration in January 2017.[29] Russia's pivot away from the US dollar and towards the euro indicates an effort to increase the proportion of the euro in foreign currency earnings derived from trade settlements and other sources. It also aligns with the Euro's strategy of internationalization, aiming to enhance the prevalence of euro-denominated contracts and payments within the energy sector.

In terms of exchange rate arrangements, Russia had maintained a close association with the euro. Following the annexation of Crimea in November 2014, Russia transitioned to a floating exchange rate system. In 2015, the process of shifting its monetary policy framework to an inflation-targeting system was completed. Prior to the transition to a floating exchange rate system, Russia had adopted a managed floating exchange rate system. Under this system, the official exchange rate was calculated using a currency basket consisting of two currencies: the US dollar and the euro.[30] However, downward economic pressures due to declining international oil and natural gas prices, coupled with reduced capital inflows resulting from Western economic sanctions, made it challenging to sustain the currency basket system. Consequently, Russia was compelled to transition to a floating exchange rate system. Despite this transition, the Russian ruble tended to maintain a stable relationship with both the US dollar and the euro. This stability is reflected in estimates of exchange rate linkages as of December 2018, as indicated in the ECB's 2019 euro report.[31]

III-3. Impact of Financial Sanctions on the US Dollar and the Euro

Russia's inclination towards the euro suggests that the euro might have had a greater impact as a tool of sanctions compared to the assumed impact of the US dollar. However, the shift in relations with Russia from interdependence to confrontation does not favor the euro area economy or enhance the euro's international role.

In comparison to the US dollar, the euro's use as an international currency has been less widespread regionally. Relations with Russia and China, both striving for hegemony with the US, have been crucial in the euro's internationalization strategy. According to an International Monetary Fund (IMF) report on exchange rate regimes and capital controls in 2022,

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[29] Hasumi (2021) p. 183.
[30] A currency basket comprising two currencies was introduced in February 2005 (Bank of Russia, Archive database, Dual-currency basket, accessed June 23, 2022).
[31] ECB (2019) p. 19.

37 countries used the dollar as the anchor currency for exchange rate regimes, while 26 used the euro.[32] The dollar's influence extended not only to geographically adjacent Latin America but also to Asia, the Middle East, and Africa. On the other hand, the euro's influence, broadly speaking, included EU member states, EU candidate countries, potential candidate countries for membership, eight the West African Economic and Monetary Union (WAEMU) nations, six the Central African Economic and Monetary Community (CEMAC) countries, and other African nations with historical ties to European countries. The euro's influence lacks regional breadth in comparison with the US dollar.

The Russian invasion of Ukraine has deepened the rift between the EU and China. The EU viewed China as a "systemic rival" even before the invasion but has heightened its vigilance further after the events in Ukraine. In February 2022, just before the invasion of Ukraine, China promised "unlimited friendship and cooperation" with Russia at a summit meeting coinciding with the opening of the Beijing Olympics. While China did not openly support Russia due to fear of secondary sanctions from the West, it displayed understanding of Russia's motives for the invasion and criticized the Western-led international order.

The EU aims to level the playing field with China, reducing over-reliance through tools such as single market access rules, and stricter human rights and environmental legislation.[33]

Western sanctions, Russia's countermeasures, and moves by other countries to avoid sanctions impact their functions as international currencies. The freezing of the Central Bank of Russia's assets encourages a shift away from the US dollar and euro. In response, Russia has countered Western sanctions by requiring unfriendly countries and regions to pay for energy in rubles. Just as Russia's energy weaponization prompted the EU to diversify its procurement sources, currency sanctions encourage diversification of payment methods and currencies.

However, financial sanctions are not expected to fundamentally alter the composition of international currencies. This is primarily due to the lack of an alternative currency with the market size and liquidity to replace the dollar (criteria 5 and 6).[34] The ECB's euro report in 2022 also supports this point.[35] Russia has de-dollarized its foreign exchange reserves, but China, holding $3.1 trillion in foreign exchange reserves (as of February 2023), is compelled to hold the US dollar due to limited options of foreign currency denominated safe assets. While financial sanctions might not diminish the US dollar's dominant status in the international monetary system, they could lead to a retreat of financial globalization.[36] Similar moves to reduce risk in the global supply chain may occur in cross-border capital flows in the future.

The deepening fragmentation of the global economy following Russia's invasion of Ukraine does not support the strengthening of the euro's role as an international currency.

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[32] IMF (2023) p. 12.
[33] Ito (2022) pp. 100-101.
[34] Brunnermeier et al. (2022) summarizes the findings of three experts on the impact of sanctions against Russia on the international monetary regime.
[35] ECB (2022b) pp. 8-11.
[36] Brunnermeier et al. (2022); Harding (2022).

IV. The Present (2) - The EU and the Euro amidst the Russian Invasion of Ukraine

Russia's invasion of Ukraine has precipitated an energy crisis, compelling the EU to recalibrate its policy priorities. This crisis could either act as an asymmetric shock, potentially threatening the stability of the euro (criteria 4 of the dominant international currency), or serve as an opportunity for more profound and extensive integration (criteria 5 and 6).

IV-1. Fiscal and Monetary Sovereignty Mismatch and Deeper Integration

Following Russia's invasion, the EU's focus shifted towards enhancing its defense capabilities, ensuring energy security by reducing reliance on Russian fossil fuels, and fortifying economic security, as outlined in the Versailles Declaration,[37] agreed upon during an informal meeting of heads of state or government in March 2022. Realizing these goals necessitates substantial investments.

Strengthening the EU's defense capabilities, although not transforming the euro area into a military power, represents a significant policy shift. Previously, EU security cooperation advanced slowly, partly due to balancing concerns with NATO. However, the "Strategic Compass for Security and Defense" policy document,[38] adopted after the invasion, advocates for development of the EU's capability such as EU Rapid Deployment Capacity along with strengthening cooperation with partners like NATO and the UN and other bilateral partners. The EU also emphasized expanding its intelligence analysis capabilities, coupled with a notable increase in defense spending by member states, exemplified by Germany's decision to raise military spending from 1.5% to NATO's 2% of the GDP target in 2024.

Enhancing energy security is pivotal for the medium-term stability of the energy single market, renewable energy supply, decarbonization, and broader integration, including neighboring nations. The "REPowerEU" initiative, focusing on reducing the EU's dependency on Russian fossil fuels, encompasses energy conservation, diversification of gas sources, promotion of clean energy, and increased investment.[39] Initiatives include establishing an EU Energy Platform for joint gas, LNG, and hydrogen purchases, involving volunteer countries and opening participation to the Western Balkans, Ukraine, Moldova, and Georgia. The strategy also includes collaboration on sustainable bio methane and renewable hydrogen, along with completing Trans-European Networks for Energy (TEN-E) and other policy support.

On the other hand, the energy crisis poses an asymmetric shock for the euro area. Realizing the Versailles Declaration requires significant investments. Fabio Panetta, member of the Executive Board of the ECB, noted, "If the responsibility for these higher investments

[37] Informal meeting of the Heads of State or Government, Versailles Declaration, 10 and 11 March 2022.
[38] Council of the European Union (2022).
[39] European Commission (2022a).

and the associated costs were to fall exclusively on the shoulders of the individual member states, this could lead to underinvestment, a less coherent and effective response to current shocks and a narrowing of fiscal space," in his July 2022 speech.[40] To prevent fragmentation within the euro area, a more robust political response to common shocks is imperative.

Yet, there has been no significant progress towards the Fiscal Union, contrasting the response during the COVID-19 crisis. A core element of the financing of REPowerEU is the use of the remaining €225 billion of loans under the RRF of NGEU. Establishing another new fund is not planned.

Such insufficient coordination of the fiscal policy among the euro area to address the energy crisis could be an asymmetric shock. The COVID-19 crisis justified large scale fiscal measures to counteract COVID-19 restrictions. However, the high inflationary phase under the energy crisis needs to have a more selective approach. Ideally, energy crisis responses should target vulnerable low-income households, promote energy conservation, and renewable energy. However, national measures, as tabulated by Sgaravatti et al. (2021) between September 2021 and January 2023, often lack specific targeting, leading to varied implementations across countries.[41]

Overall, navigating the energy crisis risks challenging the foundations of integration, intensifying political conflicts within the euro area, however, the crisis could potentially act as a catalyst for deeper integration. So far, despite internal disagreements, agreements that have been reached through the process require compromises, as seen in the complex agreement on coordinated gas demand reduction measures.

IV-2. The ECB as Guardian of the Euro

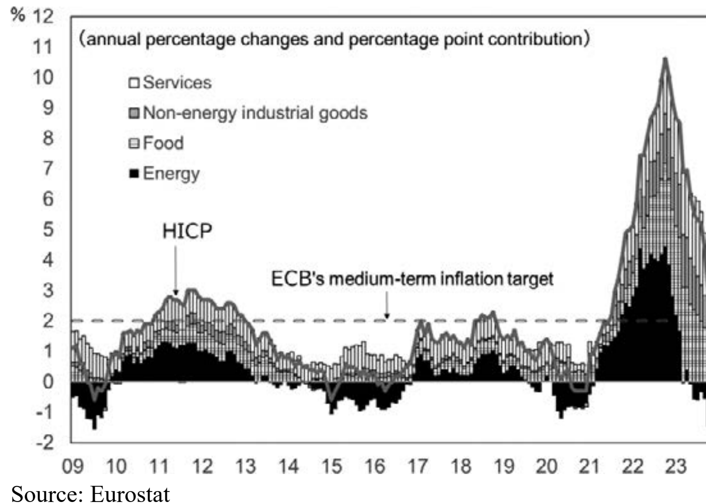
The ECB has historically served as a safeguard for the euro during crises as discussed in Chapter II-2. However, in the current context of high inflation, the ECB must prioritize its primary objective: ensuring price stability.

Inflation in the euro area surged to 4.1% y/y in October 2021, reaching its highest level since the euro's introduction, and peaked at 10.6% y/y in October 2022 (Figure 4). High inflation is primarily attributed to energy prices, although the contribution of energy to price hikes is diminishing due to market price decline and measures taken by various countries. The upward trajectory of goods and services prices persists.

Persistently high prices, far above the ECB's definition of price stability as "2% inflation over the medium term," have led to an upward shift of medium-term inflation expectations. The ECB is becoming increasingly concerned about the potential risks associated with a wage and price spiral. Despite the energy crisis, the euro area's labor market remains tight,

[40] Panetta (2022b).
[41] The database by Sgaravatti et al. (2021) had been continuously updated with the scale and content of energy crisis measures introduced by countries since 21 September 2021. The content is categorized into (i) energy-related tax reductions, (ii) retail price regulation, (iii) wholesale price regulation, (iv) transfer to vulnerable groups, (v) mandate to state-owned firms, (vi) business support and (vii) others.

Figure 4: HICP inflation and contributions



Source: Eurostat

with an unemployment rate of around 6.5%, the lowest level since the current statistical records began. This situation, coupled with policies focusing on employment protection in response to the COVID-19 crisis, could lead to demands for wage increases to compensate for declining real incomes due to surging inflation.

What poses a challenge for the ECB is the diverse manifestations of the energy crisis across the euro area due to variations in energy mixes, national policy responses, and corporate pricing behavior. In October 2022, the most recent peak in inflation exceeded 20% y/y in the Baltic countries. In contrast, France and Spain, where direct energy price controls were enforced, experienced inflation rates in the 7% range. The ECB cautions against the risk of a spiral increase in prices and wages, which could manifest differently in various countries based on labor market dynamics, industrial relations, wage formation schemes, and inflation rates.

Market concerns linger that the ECB's haste to normalize monetary policy and tighten measures might rekindle the debt crisis. Notably, the ECB suspended net purchases through APP on July 1, 2022, and decided to raise the ECB's three key interest rates by 50 basis points at the July 2022 Governing Council meeting, eliminating the negative deposit facility rate present for almost eight years (Figure 2). Subsequently, the ECB decided on rate hikes of 75 basis points at the next two Governing Council meetings, the largest hike since the ECB's establishment. The ECB has lifted rates by a combined 4.5 percentage points since July 2022 until September 2023 by an unprecedented streak of 10 consecutive rate hikes.

The Governing Council gradually recalibrated the outstanding amount of purchases under the APP. From July 2022 and February 2023 was the period of no net purchases, but full reinvestments of redemptions. From March 2023 to June 2023 was the period of no net purchases and only partial reinvestments. Since July 2023, reinvestments of redemptions have been suspended.

As a result of recalibration of the asset purchase and the redemption of TLTRO III, the balance sheet of the ECB has decreased to around €7 trillion until the end of October 2023 (Figure 3).

Alongside the decision to raise interest rates in July 2022, the ECB introduced the Transmission Protection Instrument (TPI) as a new policy toolkit to support the effective transmission of monetary policy. Subject to fulfilling established criteria,[42] TPI can be activated to counter unwarranted, disorderly market dynamics that pose a serious threat to the transmission of monetary policy across the euro area. The Eurosystem will be able to make secondary market purchases of securities issued in jurisdictions experiencing a deterioration in financing conditions not warranted by country-specific fundamentals. Coupled with the reinvestment of some PEPP redemptions until at least the end of 2024 and the OMTs introduced by former President Draghi during the euro crisis, the ECB now has three toolkits to address unwarranted surges in government bond yields.

While the ECB has historically shielded the euro with expansionary monetary policies during crises, its ability to manage asymmetric shocks associated with the energy crisis is limited. Thus, a coordinated political approach is essential to mitigate the amplification of these shocks.

IV-3. Enlargement of the Euro Area

As explored in Chapter II-3, the euro area has expanded to 20 countries until now, incorporating Croatia, and Bulgaria is expected to join in the near-term future. However, the process for these countries' euro introduction commenced in 2020 and was not instigated by the Russian invasion of Ukraine.

While the Ukraine crisis has changed the security policy arrangement of the Nordic EU member states, their exchange rate arrangement has not been affected. Denmark, after a referendum on June 1, 2022, opted to participate in the EU's common security policy, but Prime Minister Frederiksen stated that the government has no plans for a referendum regarding the euro. Similarly, Sweden, despite applying for NATO membership, hasn't shown signs of altering its stance on meeting convergence conditions for euro introduction.

On the other hand, significant changes have occurred in the EU membership enlargement process, potentially affecting the future enlargement of the euro area. Ukraine, Georgia, and Moldova applied for EU membership shortly after Russia's invasion in 2022. Ukraine and Moldova were granted candidate status in June 2022. The European Council has decided to open accession negotiations with Ukraine and Moldova and to grant Georgia the status of candidate country in December 2023.

Development for these three countries is quite unconventional. It took several years from application to decisions to open negotiations for five current candidate countries, such

[42] ECB explains the Governing Council will consider a cumulative list of criteria including compliance with the EU fiscal framework and the absence of severe macroeconomic imbalances.

as Montenegro, North Macedonia, Albania, Serbia, and Turkey (Table 3). Furthermore, accession negotiations with Turkey, which were opened in October 2005, remain at a standstill, in line with the Council Conclusions of June 2018. The continued deterioration of democratic standards, the rule of law, the independence of the judiciary and respect for fundamental rights have been obstacles of reopening the negotiation. Accession negotiations for North Macedonia and Albania have not yet opened. Bosnia and Herzegovina applied for EU membership in February 2016 and was granted candidate status in December 2022. In December 2023, the European Council decided to open accession negotiations with Bosnia and Herzegovina once the necessary degree of compliance with the membership criteria is achieved. Kosovo remains a potential candidate. Even in the case of Montenegro and Serbia, which have made the most progress in accession negotiations among the Western Balkans, very few chapters of all 35 chapters are provisionally closed so far.

For the current candidate countries including Ukraine, it might take at least 10 years to conclude the whole negotiation process. Even after accession to the EU, convergence conditions need to be met for the introduction of the euro. It is not possible to foresee the adoption of the euro by countries with candidate status in the foreseeable future. Even if the euro area were to be extended to cover all candidate countries other than Turkey, which seems to effectively abandon the option of EU membership, the impact on criteria relating to the euro's status as an international currency, as discussed in Chapter I, would be limited. The greater the variation among the adopting countries, the greater the difficulty of monetary policy, etc., and the possibility that concerns about the stability of (criteria 4) may intensify.

As for Ukraine, the EU's support is substantial and long-term, as demonstrated by the recognition of Ukraine's candidacy for EU membership. The EU and the euro are poised to play significant roles in Ukraine's reconstruction efforts.

Table 3: Overview table of the progress of EU membership procedure

	Application for membership	Granted candidate status	Decision to open accession negotiations	Latest situation
Turkey	1987	1999	2004	Officially at a standstill since 2018
North Macedonia	2004	2005	2020	Screening process
Montenegro	2008	2010	2012	Three chapters provisionally closed
Serbia	2009	2012	2013	Two chapters provisionally closed
Albania	2009	2014	2020	Screening process
Ukraine	2022	2022	2023	–
Moldova	2022	2022	2023	–
Georgia	2022	2023	–	–
Bosnia and Herzegovina	2016	2022	2023	–
Kosovo	2022	–	–	–

Source: European Commission, 2023 Enlargement Package Factsheet for each country

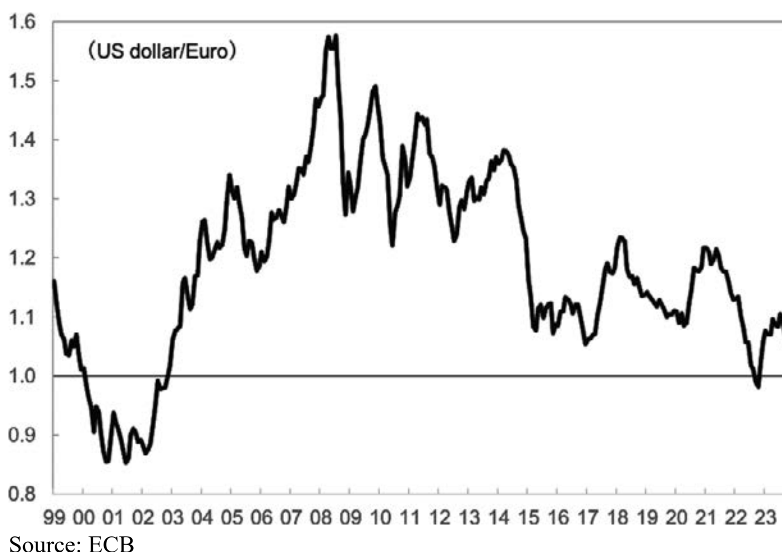
IV-4. Political Will to Strengthen the Euro's International Role

The invasion of Ukraine by Russia has propelled the EU's strategic autonomy from a mere slogan to an urgent goal.

The policy to enhance the euro's role as an international currency remains steadfast, and a heightened sense of ambition pervades. Despite the EU and the US aligning their steps in response to the Russia-Ukraine war, the necessity of reducing the influence of FRB's monetary policy, as discussed in Chapter II-4, has gained prominence. In a significant development, the euro's exchange rate against the dollar fell below parity in autumn 2022 for the first time in two decades, a situation exacerbated by concerns about recession in the euro-area and issues with energy supplies from Russia. Along with the deceleration of the interest rate hikes by the FRB, the euro's exchange rate against the dollar has recovered (Figure 5). This episode underscores the influence of the Fed's monetary policy and the fragility of the euro.

Economic and Financial Affairs Council on 5 April 2022 reaffirmed its commitment to "strengthening the international role of the euro" as a cornerstone of its strategic autonomy of the European economic and financial sector. This direction was outlined in the Commission's policy paper of January 2021, which also emphasized the need to enhance and deepen the EMU.[43]

Figure 5: Development of the US dollar/Euro exchange rate



Source: ECB

[43] Council Conclusions on the EU's economic and financial strategic autonomy: one year after the Commission's Communication

Additionally, a pressing challenge lies in countering the growing influence of China's renminbi. Under Xi Jinping, China's economic orientation has diverged from the US-style capitalism, and a shift in China's cautious approach to capital transactions seems improbable. On the other hand, the People's Bank of China (PBC) is ahead of other major central banks in its Central Bank Digital Currency (CBDC) initiatives.

The ECB also has taken proactive steps in developing a CBDC. The "preparation phase" of the digital euro project started on November 1, 2023. This phase follows the completion of the "investigation phase" launched in October 2021. After two years, the Governing Council will decide whether to move to the next stage of preparations, to pave the way for the possible future issuance and roll-out of a digital euro. According to the statements of the Fabio Panetta,[44] as the former Member of the Executive Board of the ECB in charge of digital euro, the digital euro is expected to serve as an anchor in the digital financial world and to uphold the international currency status, sovereignty, and strategic independence of the euro area.

V. Conclusion - The Future International Status and Role of the Euro

The uncertainties surrounding the shocks triggered by Russia's invasion of Ukraine loom large. Currently, the EU is navigating the energy crisis stemming from the invasion through a mix of targeted fiscal measures, increased investments within the existing framework, and ECB-led monetary policy tightening. However, this strategy might not be robust enough to absorb asymmetric shocks and could potentially rekindle the debt crisis. Additionally, concerns have surfaced about excessive and prolonged fiscal measures and substantial subsidies among larger countries, possibly distorting intra-regional competition. The collapse of several US banks and a major Swiss bank crisis in spring 2023 underscored the need for deeper political coordination to maintain the stability of the euro's status.

Reflecting on the EU's response to the COVID-19 pandemic, initial reactions were sluggish, but eventual concerted efforts, epitomized by the NGEU, brought about significant progress. The response to the euro crisis lagged behind the development of financial markets, but supported by the ECB's bold monetary policy, the necessary decisions were taken to stabilize the euro system.

Amid the energy and security crises triggered by Russia's invasion of Ukraine, the EU has the opportunity to solidify political agreements essential for safeguarding the euro. Through sanctions on Russia and support for Ukraine, the EU has displayed unity grounded in shared fundamental values. Public opinion polls affirm the growing support among EU citizens for the single market and single currency.[45] However, occasional challenges from

[44] Panetta (2021) focuses on the international dimension of CBDCs, pointing out that CBDCs available to non-residents could affect "dollarisation (replacing the national currency in circulation)," changes in exchange rates and capital flows, and the international role of currencies; Panetta (2022a) stresses the need for action to prepare for the possibility of a future in which large country CBDCs, with their economies of scale, liquidity and security, play an increasing role as a means of international settlement and the euro's position declines.

within, like Hungarian Prime Minister Orban's opposition to €50 billion financial aid package for Ukraine, highlight the delicate balance between shared values and interests among the euro area and the EU member states.

Even though it is likely that repeated efforts will be made to reach the political agreements required to safeguard the euro and that the euro will strengthen its position as the key currency of Europe, with the retreat of globalization on the other hand, the further expansion of the euro's international role beyond Europe is expected to be limited.

The future position of the euro will not solely hinge on euro-centric factors. China's policy decisions and the international community's response to China's influence will play pivotal roles. While a significant shift in China's cautious stance on capital transactions is improbable in the near-term future, its deep connections with emerging and developing nations, coupled with Russia's increasing alignment with China, may boost the renminbi's international status. China also expressed its willingness to assist in Ukraine post-war reconstruction in its position paper.[46]

The renminbi could be one of the influential currencies keeping its unique character distinct from the dollar and the euro.

Even as the world becomes increasingly fragmented, the euro is likely to remain as the international currency that ranks second after the US dollar and surpasses the renminbi. However, the gap between the euro and the renminbi is likely to narrow steadily.

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[45] According to the Flash Eurobarometer 512: The euro area, November 2022, the proportion of respondents who answered "good" to the question "Having the euro is a good or a bad thing for the EU" was 66% in the bottom in the November 2011 survey, but 77% in October 2022 survey. The proportion of respondents who answered "good" to the question "Having the euro is a good or a bad thing for your country" has been rising steadily from 45% in the September 2007 survey to 69% in the October 2022 survey.

[46] Ministry of Foreign Affairs of the People's Republic of China (2023).

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