IS THE EURO UNDERGOING A CRISIS?

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Abstract

The objective of the paper is to assess, whether there is a euro crisis under way. A currency crisis concept - viewed as a 25% depreciation of the EUR/USD exchange rate - has been applied, together with a crisis concept as a long-term depreciation of the USD/EUR exchange rate, and finally a crisis as the impaired international role of the euro. The following are examined: share of the euro in foreign exchange reserves, importance of the euro in the financial markets, expansion of the euro as national currency, and application of the euro as reference currency within various exchange rate systems. The paper comes to a conclusion that neither of the aforementioned indicators evidences a euro crisis. However, a potential future euro crisis may be invoked by a debt crisis within the euro area. This is preconditioned by sufficiently strong fundamental reasons for investor’s skepticism about the debt crisis resolution and ability of the ECB to prevent the euro exchange rate depreciation.

Keywords: Currency crisis, exchange rate, foreign exchange reserves, euro area, debt crisis

Introduction

This paper examines the development of the euro from several perspectives, which are cogent for assessing the potential currency crisis. First of all, it is the narrow concept of a currency crisis in terms of the criteria set down by the International Monetary Fund (first part), followed by the long-term development of the USD/EUR exchange rate (second part) and role of the euro within international relations (third part). Finally, the connections of the euro crisis with the euro area debt crisis are investigated (fourth part).

The objective of the paper is to assess – by analyzing a number of indicators - the development of the euro in terms of the “critical nature” of such development and to arrive at a conclusion of whether the euro is/is not in fact undergoing a crisis, while identifying potential causes for such crisis.

1. Literature

The fundamental literature dealing with the birth and development of the euro mainly comprises O. Issing (*The Birth of the Euro*, 2008) or the volume of papers *The Euro at Ten: The Next Global Currency?* (Pisani-Ferry, Posen, 2009). The current role of the euro is analyzed by the European Central Bank (*The International Role of the Euro*, 2013). L. Goldberg addresses the comparison of international roles of the euro and the dollar (*The International Role of the Dollar*, 2011).

With regard to literature dealing with the "euro crisis", the study of such papers and essays reveals that, according to the respective authors, the "euro crisis" refers to the "European sovereign debt crisis" (Aizenman et al., 2013) or the "euro zone sovereign debt crisis" (Aizenman et al., 2012). In another case, the term "euro crisis" is explicitly defined, but it is used again for pro „European sovereign debt crisis" (Claessens et al., 2011). Moreover, it is possible to come across the term "European crisis", where authors refer to the "European financial crisis" – i.e. the debt crisis as well as the banking crisis (Bordo, James, 2013).

Unlike the aforementioned examples, when the European Central Bank mentions the term "crisis" in connection with the euro area, it does not refer to the "euro crisis, but to the "euro area sovereign debt crisis" (European Central Bank, 2012).[115]

2. Methodology (currency crisis)

A) The basic concept of a currency crisis, established by the International Monetary Fund (IMF), is the development of the exchange rate for the currency under review, expressed in USD, yearly average and year-to-year comparison of the exchange rate. In this context, there is a currency crisis in case of (International Monetary Fund, 1998):[116]

- Year-to-year depreciation of the given currency's exchange rate at least 25%; and
- Simultaneously, at least a 10 p. p. annual increase of this indicator.

[115] Some popularization articles express similar opinion. "Far from abating, the euro crisis has taken a turn for worse in the recent months", says G. Soros, referring to the expansion monetary policy of the European Central Bank (Soros, 2012).

[116] In addition to this, there are also sophisticated FX market pressure indices, most frequently also comprising – in addition to the currency exchange rate development – the development of foreign exchange reserves and interest rates in the given country, in a specific relative representation (i.e. relatively to a specific reference value).

Modification of this criteria describes a currency crisis as even a minor depreciation of its exchange rate; however, if accompanied with certain qualitative change.[117]

B) Applying a looser concept, a long-term depreciation of a currency's exchange rate may be described as a critical development of a currency, as the manifestation of investor's skepticism concerning the given economy and its currency.

C) Another concept of a currency crisis may be the worsening role of such currency as the so-called international currency, i.e. a currency used outside the jurisdiction of its issuer, specifically (Issing, 2008, p. 176 et seq.):

- In foreign exchange reserves of central banks;
- In international financial transactions;
- As national legal tender (by replacing country's original currency);
- By applying such currency as reference currency for exchange rate regimes.

3. Measurements

In order to trace the euro crisis in terms of the IMF concept, we will observe the development of the EUR/USD exchange rate, specifically its yearly averages (Table 1).

Table 1: Exchange rate EUR/USD development (yearly averages)

	1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
EUR/USD	0.939	1.085	1.117	1.061	0.885	0.805	0.805
Change in %	-	15.5	2.9	- 5.0	- 16.6	- 9.0	0.0
	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
EUR/USD	0.797	0.730	0.684	0.720	0.755	0.719	0.778
Change in %	- 1.0	- 8.4	- 6.3	5.3	4.9	- 4.8	8.2

Source: OECD (http://stats. oecd. org/index. aspx? queryid=169). Own calculations.
Note.: + means depreciation, - means apreciation.

Periods of depreciation (5 years when expressed with yearly data) and appreciation (7 years) alternated throughout the history of the euro; the exchange rate did not change for one year.

In order to analyze the long-term development of the euro exchange rate (as USD/EUR), we will use daily exchange rates. Figure 1 shows the overall existing development of the USD/EUR exchange rate.

[117] This was the case of, for example, the crisis of the Czech koruna in May 1997, when the fixed exchange rate system was abandoned (for more details, see Helisek, 2004).

Figure 1: Exchange rate USD/EUR from 4. 1. 1999 to 2. 12. 2013 (daily)

Source: European Central Bank (http://sdw.ecb.europa.eu/quickview.do?SERIES_KEY=120.EXR.D.USD.EUR.SP00.A#top)

We are going to express the role of the euro within international relations using the four above mentioned methods.

The share of the euro in official foreign exchange reserves is shown in Table 2.

Table 2: Currency Composition of Foreign Exchange Reserves (end of year, USD bn., %)

	1999	2012
Total reserves	1,379.7	6,082.8
Share of the USD	71.0	61.9
Share of the EUR	17.9	23.9

Source: International Monetary Fund (http://www.imf.org/external/np/sta/cofer/eng/cofer.pdf)

Note: Total reserves = reserves, whose currency composition has been identified. 2012 = preliminary data. Other major currencies are GBP and JPY with equal shares of 4%.Own calculations.

We will express the role of the euro in international financial transactions as share of the euro in international credit facilities (Table 3).

Table 3: The position of the euro in international financial markets (stock, end of year)

	Total (USD bn.)		Share of the EUR (%, at current exchange rates)	
	2000	2012	2000	2012
Outstanding international debt securities	4,994	19,374	23.7	37.7
Outstanding international loans	1,852	6,059	14.4	20.3
Outstanding international deposits	2,102	6,390	18.6	19.0

Source: European Central Bank, 2013, pp. 68, 76, 77.

Note: International debt securities according the „broad" measure by the BIS (international debt securities are those issued in a market other than the local market of the country where the borrower resides). Loans and deposits 2012: end of 3Q.

The euro is not only used as a monetary unit in the euro area member states. It is also adopted by nonmember states of the euro area, which cannot take part in the formation of the single monetary policy. This is the so-called euroization. In case of candidate and potential candidate countries for the EU accession, it concerns the so-called unilateral euroization; however, this practice is conflicting due to the evasion of the Maastricht Treaty. The countries using the euro are listed in Table 4.

Table 4: Euro as the national currency

	Country
Member countries of the euro area	17 countries *
Euroisation	Vatican, San Marino, Monaco, Andorra
Unilateral euroisation	Kosovo, Montenegro

Source: European Central Bank, 2013, p. 67.

*Note: * From 1 January 2014 can be expected accession of Latvia.*

Another indicator of the international role of a currency is the use of such currency as reference currency within exchange rate regimes. These relations to the euro are shown in Table 5.

Table 5: Exchange rate regimes linked to the euro (as at end-May 2013)

Exchange rate regimes	**Country**
Participation ERM II	Denmark (±2,25 %), Latvia (±1 %), Lithuania (currency board)
Currency board	Bulgaria, Bosnia and Herzegovina
Managed floating	Czech Republic, Romania, Croatia, Macedonia
Peg	20 countries in Africa and Polynesia (in particular the CFA franc zone)
Other	From 6 September 2011 established Switzerland min. rate 1.2 CHF/EUR (The Swiss National Bank performs unlimited intervention).

Source: European Central Bank, 2013, p. 67.

Note: Another 14 countries connect the exchange rate of its currency to currency baskets involving the euro.

4. Discussion

In applying the IMF criterion (i.e. year-to-year depreciation of at least 25% in respect of the given currency's exchange rate), we discover that the highest depreciation amounted to 16%, specifically in 2000. The significant depreciation of the euro this year can be explained by distrust of markets to entirely new currency. It was not therefore a significant qualitative change. Another significant devaluation took place in 2012 (8%). It was a sign of distrust of investors caused by the debt crisis in some euro area countries.

From this perspective, the euro crisis does not exist.

In terms of the long-term trend, the euro exchange rate is actually appreciating (and not depreciating):

- Starting value: 1.179 USD/EUR;
- Final value: 1.354 USD/EUR;

Albeit significant fluctuations:

- Maximum value: 1.592 USD/EUR (22 July 2008)
- Minimum value: 0.825 USD/EUR (26 October 2000)

The long-term appreciation of the euro exchange rate does not corroborate the currency crisis.

Not even the development of the euro's role within international relations – expressed by the four indicators – supports the euro crisis eura (while the dominant role in all functions remains of the U.S. dollar; see Goldberg 2011):

- Euro possessions in foreign exchange reserves of the central banks have been increasing since the currency's birth. In recent years, the share has stabilized around ¼;
- The share of the euro in international financial transactions is increasing;
- With the gradual expansion of the euro area, the number of countries using the euro instead of their former national currencies is increasing; 6 more countries have adopted the euro via the so-called euroization. Overall, the euro is used in 23 countries;
- In total, 29 countries link the exchange rate of their national currencies to the euro.

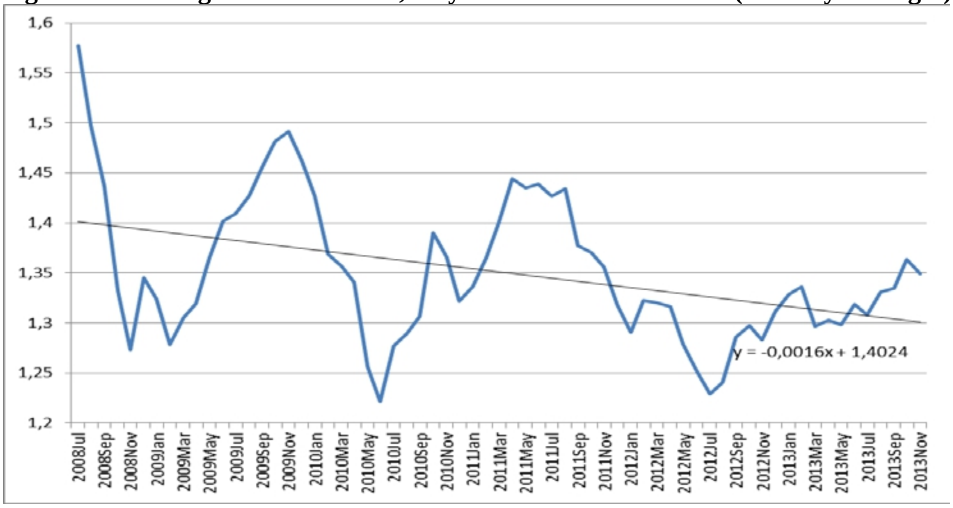
However, it is currently possible to observe a depreciation trend of the USD/EUR exchange rate from a medium-term perspective:

- The appreciation trend peaked on 22 July 2008 – at 1.59 USD/EUR;
- This was followed by a considerable deprecation of the exchange rate (with varied fluctuations), with the minimum on 8 June 2010 – at 1.19 USD/EUR; and
- The medium-term deprecation trend has been prevailing to this day, i.e. more than five years.[118]

The depreciation trend is shown in Figure 2.

[118] 16 September 2008, i.e. a day before the onset of the financial crisis (declared bankruptcy of the American investment bank Lehman Brothers), the USD/EUR exchange rate amounted to 1.43. Therefore, the euro exchange rate depreciation started more than three months prior to the financial crisis.

Figure 2: Exchange rate USD/EUR, July 2008 – November 2013 (monthly averages)



Source: European Central Bank (http://sdw.ecb.europa.eu/browse.do?node=2018794). Own elaboration.

Is it possible to rate the medium-term development of the euro exchange rate as critical? From the initial trend value of 1.40 USD/EUR, the euro depreciated to 1.30 USD/EUR over the period of 65 months, i.e. by 7.1% in five years.

From this perspective, the situation may hardly be described as existing euro crisis.

A stabilizing effect is accredited to the euro in the course of the financial crisis and the following economic recession. In 2009, this was summarized by the former Managing Director of the International Monetary Fund, D. Strauss-Kahn:

- Although the euro-dollar rate is sometimes subject to more significant fluctuations, but none of them approach the intensity of currency crises, as such risk would exist (implicitly) in case of separate national currencies;
- Instead of the euro appreciation, the Deutsche Mark would have appreciated; however, much more than the euro now; in other countries, political and business forces would have lined up in favor of decoupling or devaluing against the mark;
- Possibility to change parities would lead to capital outflows from the risky countries, followed by increase in the risk premiums and interest rates and lower economic growth;
- Devaluations would lead to inflation pressures.

“There is no question that the euro has contributed to the stability of its member countries during this crisis” (Pisani-Ferry, Posen 2009, p. 36).

Similarly, the stabilizing effect of the euro is mentioned in the strategic document of the European Commission *Europe 2020*, which seeks resorts and lessons to be drawn from the financial crisis and economic recession; in this regard, it attributes great significance to the single currency: “The common currency has acted as a valuable shield from exchange rate turbulences for those Member States whose currency is the euro.” (Commission of the EC, 2010, p. 24).

The stabilizing effect of the euro on the mutual relations of the euro area member states cannot be viewed as the demonstration of the euro crisis either.

5. Debt crisis in the euro area

The debt crisis of some euro area countries may become a potential threat to the euro.

A debt crisis shall refer to a situation, where governments of the affected euro area countries apply for financial assistance under one of the euro area stabilization mechanisms (bilateral aid, European Financial Stability Facility EFSF, European Stability Mechanism, which adopted the EFSF agenda) or for loans by the International Monetary Fund, as appropriate. This has taken place in the following places (Table 6):

Table 6: Euro area states affected by the debt crisis

	Mechanism	**Aid provided as from**
Greece	Bilateral aid – euro area states (transferred to the EFSF) + IMF	April 2010
Ireland	EFSF + IMF	November 2010
Portugal	EFSF + IMF	May 2011
Spain	ESM	December 2012 *
Cyprus	ESM + IMF	May 2013

Source: ESM and EFSF (http://www.efsf.europa.eu/about/index.htm, http://www.esm.europa.eu/index.htm)

*Note: * First transaction of the ESM (recapitalization of Spanish banks) – first state of the aid fell under the EFSF and it was subsequently transferred to the ESM.*

Debt crisis may spread to other euro area countries, such as Italy and Slovenia. The question is not about the number of countries. The problem lies in their contribution to the overall economic performance of the euro area. Table 7 indicates the percentage of countries affected by the debt crisis in the total euro area GDP (hypothetically also Italy and Slovenia).

Table 7: The share of suro area GDP (2012, current prices, PPS)

Country	Share (%)
Greece	2.04
Ireland	1.73
Portugal	4.02
Spain	10.84
Cyprus	0.19
Total 5 countries	**18.82**
Italy	16.52
Slovenia	0.37

Source: Eurostat (http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction. do?tab=table&plugin=1&pcode=tec00001&language=en). Own calculation.

The risk of insolvency on the part of such countries' indebted governments leads to the skepticism of international investors in respect of such economies. The skepticism may also be carried over – to the economic development of the euro area **as a whole** and, consequently, to its currency (euro) as well.

Current share of the countries affected by the debt crisis, represents less than a fifth of the euro area GDP. In the case of spread of the debt crisis to Italy would be a more than one-third, that a significant proportion.

If the skepticism spreads among investors (so-called investor's herding effect), they will start getting rid of the euro. This will include both cautious (and disappointed) investors and speculators (particularly hedge funds). This will result in the depreciation of the euro rate and its weakening international role. Subsequently, it could lead to a euro crisis.

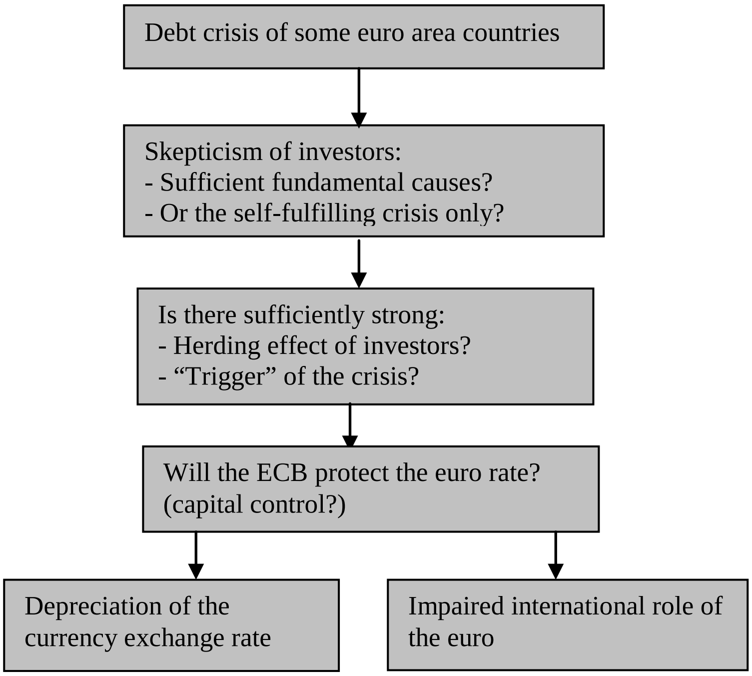
How likely is this scenario? The answer depends on analyzing the following questions:

- Will the skepticism of rational investors with regard to the given economy (euro area) and, consequently, to its currency (euro) stem from problems actually existing, i.e. from the so-called fundamental causes for such skepticism, leading to a hypothetical currency crisis?
- Or will the investors' skepticism be only fueled by mere expectations of such adverse development, irrespectively of the factual presence of the fundamental causes for their skepticism, leading to the so-called self-fulfilling currency crisis?
- Will the above mentioned "herding effect" work?
- Will there be any event strong enough to act as the crisis "trigger"?
- Will the ECB be determined to "protect" the euro rate, thereby discouraging "outflows" of investors as well as "attacks" foreign exchange speculators? Is it only going to use foreign exchange

market interventions or is it also going to impose the control of international movement of capital?

The aforementioned implications are shown in Figure 3.

Figure 3: Debt crisis and perspectives of the euro



Source: Own elaboration

The existing development of the debt crisis does not allow unambiguous conclusions in respect of the future euro crisis. However, existing measures of the European Union evidence intensive efforts aimed at preventing any concerns on the part of investors, specifically:

- Immediate measures – in the form of the above mentioned stabilization mechanisms;
- Expansion monetary policy of the ECB. In September 2012, the ECB decided about the possibility of buying an unlimited amount of government bonds of euro area countries that are undergoing debt problems. This is called “outright monetary transactions” (OMT) on secondary markets;
- Medium-term projects – commencement of activities aimed at forming a fiscal union and banking union.

Conclusion

The euro crisis is not corroborated by:

- Either the euro rate development (the currency crisis criterion is not met – long-term appreciation of the rate); or
- Development of its existing role within international relations (steadily high share in foreign exchange reserves, in financial and FX markets, and utilization of the euro as reference currency in various exchange rate systems).

However, a future euro crisis may stem from a debt crisis in the euro area. Whether or not this is the case depends on the existence of fundamental causes for investors' skepticism, on the possibility of the so-called self-fulfilling currency crisis, as well as the convincingness of the European Union's efforts aimed at resolving the debt-related problems and retaining the investors' confidence.

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