

# CURRENT ISSUES OF THE ‘HUNGARIAN EURO’ WITH SPECIAL REGARD TO THE SELF-SET ‘MAASTRICHT 2.0’ CRITERIA



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## Abstract

The author strives to answer why Hungary stayed out of the Eurozone so far and if there is any chance of a nearby accession. In order to do so, in the first part the author introduces the opinions of high-ranking officials and the Hungarian convergence data from the last twenty years. In this regard, the author provides an insight how the political will and the economic possibilities did not collide: as a Hungarian peculiarity while there was a political will in the 2000s to access, the economic situation did not allow it. The situation has been the opposite in the last years: in the author's view, between 2014 and 2020 Hungary would have had the opportunity to access the eurozone with a little extra effort exerted, however, it was not on the top of the priority list. Last, but not least, the author introduces the consequences of the decision of the drafters of the Fundamental Law to grant constitutional rank to the forint as the legal tender of Hungary.

In the second part, the author provides a brief introduction of the ‘post-Eurozone debt crisis’ regulatory choices of the EU legislator – namely the creation of the Banking Union – and also the choices of the Hungarian legislator on the nexus between the Hungarian Central Bank and the institutions of the Banking Union. This way, the author can make conclusions on the maturity of the Banking Union's institution and their functioning and evaluate the earlier arguments in the studies issued under the aegis of the HCB, namely that the rules of the Banking Union are unclear and their functioning displays uncertainty. The author also provides a comparison of the chosen crisis management tools of the ECB and the HCB related to

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three crises, namely: the Euro-zone debt crisis, the COVID-19-related crisis and the Russo-Ukrainian War related crises. The author concludes on the chosen crisis management tools of the ECB and the HCB, highlighting the similarities and differences.

**Keywords:** Hungarian Central Bank, monetary policy, convergence criteria, real convergence, Maastricht 2.0, Economic and Monetary Union, Eurozone, Banking Union, COVID-19, Russo–Ukrainian War

## 1. The question of the Hungarian Euro

### 1.1. *The opinions of the high-ranking officials on the Euro in the last twenty years*

‘There was a bright optimism.’ – *Ferenc Bartha*’s<sup>1</sup> thoughts on the professionals’ opinion around the Millennium on the possibility of introducing the Euro soon after Hungary’s EU accession.<sup>2</sup>

In 2001, the then *Orbán* government set 2007 as a target date, which according to *Zsigmond Jári*<sup>3</sup> seemed a realistic objective. However, as a result of the undisciplined fiscal policy of the subsequent governments, the budget deficit and the public debt rapidly increased, which rendered the introduction of the Euro a more and more distant possibility, he added.<sup>4</sup> The last known official target date was 2010, however this “deadline” passed without a result. The currently governing party emerged to power in the same year. Seemingly, the introduction of the euro has not been on the top of the priority list ever since. The then minister of finance, *György Matolcsy* said in 2011 that the country’s accession to the Eurozone was no longer a desirable goal as the Greek Sovereign Debt Crisis proved the weakness of the Eurozone. In 2015, Prime Minister *Viktor Orbán* stated that ‘the introduction of the euro in Hungary shall be abandoned.’<sup>5</sup> In January 2020, the Prime Minister reaffirmed that in the government’s view the country is not prepared to access the Eurozone. Accession should happen only after the country’s real economic indicators approximate the

1 The last governor of the Hungarian Central Bank before the change of regime (1988-1990) and the member of the Medgyessy Government’s governmental working group mandated to prepare the introduction of the Euro.

2 Kenessey, 2022.

3 Governor of the HCB between 2001 and 2007.

4 Jegyzőkönyv az Országgyűlés Alkotmányügyi, igazságügyi és ügyrendi bizottsága 2002-2010 közötti lakossági devizaeladósodás okainak feltárását, valamint az esetleges kormányzati felelősséget vizsgáló albizottságának, 2011. november 3-án, csütörtökön 8 óra 3 perckor az Országház főemelet 58. számú tanácstermében megtartott üléséről, pp. 6-9. (AIB-DEV-4/2010-2014.). Available at: <https://www.parlament.hu/biz39/bizjvk39/AIB/A412/1111031.pdf> (accessed: 17 December 2023)

5 Menich-Jónás, 2021, p. 71.

same indicators of Austria.<sup>6</sup> In July 2023, when asked whether the past year would have been easier if Hungary had adopted the euro as its currency, Hungarian finance minister *Mihály Varga* said that it probably would have been. However, he also emphasised that the euro is not a “panacea” and in itself it does not make an economy better or worse. What really matters is the quality and effectiveness of economic policy. The Czech economy is performing better than the Slovak economy, even though the Slovaks have the euro, and the Czechs have their own currency. We need to think about the opportunity, but the government should not rush into this,”<sup>7</sup> he added.

The current Governor of the *Hungarian Central Bank* (HCB) – György Matolcsy<sup>8</sup> stated in a 2023 interview that:

Perhaps around 2030 or a bit later we could reach [...] 90% of the EU’s average in terms of development, then it is worth entering the Eurozone as the Euro has many advantages [...] Until then, it is worth using the extraordinary room for manoeuvre that having a national currency allows the Hungarian Central Bank to boost the economy.<sup>9</sup>

The recent thoughts of Matolcsy on the introduction of the euro in Hungary made this topic actual again, however, it has to be noted that Matolcsy’s statement does not mean that there is an official date for Hungary’s accession to the Eurozone since the introduction of the euro – and the target date – would require government decision.

Last, but not least it is worth taking an insight to the opinion of the “man on the street” on the introduction of the Euro in Hungary. As for the Hungarian citizens, they are the most supportive (66%) among the citizens of the non-Eurozone V4 countries: in comparison, the Czechs are the most dismissive in this regard and the Polish citizens, too, are more reluctant towards the common currency compared to the Hungarian ones.<sup>10</sup> Economic operators seem to support Hungary’s membership in the Eurozone as well: in their view Hungary is ready to the introduction of the common currency and it would be useful for the Hungarian economy.<sup>11</sup>

6 Menich-Jónás, 2021, p. 71.

7 Rádai, 2023.

8 Governor of the Hungarian Central Bank (2013–).

9 Heinrich, 2023.

10 Eurobarometer 465 18 May 2018. Available at: <https://europa.eu/eurobarometer/surveys/detail/2187> (Accessed: 17 December 2023); Republikon, 2022.

11 Sipos, 2019.

## 1.2. Hungary and the Maastricht Convergence criteria

At the time of writing the current lines,<sup>12</sup> Hungary is a so called ‘Member State with a derogation’ under Article 139(1) of the Treaty on the Functioning of the European Union<sup>13</sup> (TFEU), which means that provisions of the Treaties defined in Paragraph (2) of the said article shall not apply to her. Based on 140(1) of the TFEU:

at least once every two years, or at the request of a Member State with a derogation, the Commission and the European Central Bank shall report to the Council on the progress made by the Member States with a derogation.

Summarising the provisions of Paragraphs (2) and (3), the Council shall, on a proposal from the Commission, after consulting the European Parliament and after discussion in the European Council, decide if the Member State with a derogation fulfilled the criteria set in Paragraph (1) and abrogate the derogations of the Member State concerned. If it decides to abrogate the derogation, the Council shall, on a proposal from the Commission and after consulting the European Central Bank, irrevocably fix the rate at which the euro shall be substituted for the currency of the Member State concerned. The Council shall take the other measures necessary for the introduction of the euro. In doing so, the Council shall proceed with the unanimity of the Member States whose currency is the euro and the Member State concerned.

Hungary has never met the criterion set in Article 140(1) so far, thus the mechanism according to Article 140(3) has never been triggered. Mihály Varga explained in 2017 that Hungary intentionally avoided fulfilling every criterion.<sup>14</sup>

Comparing the convergence reports of 2004<sup>15</sup>, 2010<sup>16</sup>, 2014<sup>17</sup>, 2020<sup>18</sup>, and 2022<sup>19</sup> allows to draw well-founded findings regarding how realistic the country’s Euro accession was in the past and how realistic is it nowadays. As *Judit Menich-Jónás* concluded, if we compare the former target dates for the introduction of the euro with these data, the conclusion can be drawn, that in 2002 it was unrealistic to expect accession in 2007.<sup>20</sup> As *Péter Mihályi* wrote in a 2012 study, fulfilling the Maastricht Criteria has been relegated to a position of lesser importance on the list of priorities of successive governments.<sup>21</sup> Instead – as *Neményi* and *Oblath* argue – short-term

12 November 2023.

13 Consolidated version of the Treaty on the Functioning of the European Union (OJ C 326, 26.10.2012, pp. 47–390)

14 MTI, 2017.

15 ECB, 2004.

16 ECB, 2010.

17 ECB, 2014.

18 ECB, 2020.

19 ECB, 2022.

20 Menich-Jónás, 2021, p. 70.

21 Mihályi, 2012, p. 918

political considerations have successively overridden medium-term stability-oriented macroeconomic policies. The instability and unpredictability of the economic policy caused Hungary to lag behind the region.<sup>22</sup> As *Ákos Péter Bod*<sup>23</sup> summarised in 2007: 'The peculiarly Hungarian story is that we were closer to meet the Maastricht criteria in 2000 than in 2006, which is (if I may say so) a laughing stock.'<sup>24</sup>

The author of the current article agrees with the above authors that it is clear from the convergence reports that while before 2014 the Eurozone accession was rather a wishful thinking due to the undisciplined fiscal policy of the former governments and the financial crisis started in 2007. In his view, somewhere between 2014 and 2020 Hungary would have had the opportunity to fulfil the Maastricht criteria and access the Eurozone with some extra effort exerted. However, this was not among the government's plans based on the above-mentioned 2017 statement of Mihály Varga, who explained that Hungary intentionally did not fulfil every criterion. Co-authors *Neszmélyi* and *Pócsik*<sup>25</sup> argued that even in 2021 – after the outbreak of the COVID-19 pandemic – we were not far from reaching compliance. Based on the 2022 Convergence Report, Hungary's indicators started to deteriorate as the COVID-19 pandemic and then in 2022 the Russo-Ukrainian War did their effect on the country's economic performance.

### 1.3. Pros and Cons of Joining the Eurozone

When examining the expected pros and cons of joining the Eurozone from a Hungarian perspective, it is worth examining the studies issued under the aegis of the HCB first. In their 2002 study co-authors *Csajbók* and *Csermely*<sup>26</sup> emphasised that it is important to raise the question whether an *Optimum Currency Area*<sup>27</sup> will come into existence between the member state country and the Eurozone. In their view, it is also important to answer whether the common monetary policy can be as efficient as the member state's monetary policy in countering the economic cycles. Their main finding was that the introduction of the euro may raise the growth rate of Hungarian GDP by 0.6 to 0.9 percentage points in a long-term<sup>28</sup> average. They identified and quantified three benefits and costs. The benefits are namely: reduced transaction costs, expansion of foreign trade, and a drop in real interest rates. The costs in their view are lower seigniorage revenues and the loss of independent monetary policy. They also identified certain dangers of the accession, namely: if non-resident investors are confident that Hungary will join the eurozone soon, it may trigger speculative capital inflows and start off a "convergence play" similar

22 Neményi and Oblath, pp. 587–588.

23 Governor of the HCB 1991–1994

24 Kenessey, 2023.

25 Neszmélyi and Pócsik, 2021, pp. 646–647.

26 Csajbók and Csermely, 2002, p. 208.

27 As first described by Mundell and Balassa. – See: Mundell, 1960, pp. 657–665; Balassa, 1961, p. 324.

28 Some 20 years.

to the ones that had involved other countries earlier in preparation of accessing the Eurozone. Finally, they warned that the rapid fulfilment of the Maastricht criteria on inflation and the fiscal deficit may cause economic discrepancies and may result in a sacrifice of growth. However, they summarised their cost-benefit analysis as follows: ‘The quantifiable benefits arising from joining the euro area considerably exceed the costs entailed, resulting in higher economic growth and faster real convergence towards Western Europe.’<sup>29</sup>

Later studies seemed to be more cautious, when it came to the issue of accession. Co-authors *Kisgergely* and *Szombati* emphasised in their 2014 study<sup>30</sup> that the accession would mean the loss of the country’s monetary sovereignty. They also raised the question if the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM) are more efficient than the domestic supervision mechanisms. In their conclusion, they are not.<sup>31</sup> They argued that: competence between community and domestic authorities were not clear enough – that is to say, it was not clear who will have the last say – furthermore, the mechanism seemed to be bureaucratic and that no clear rules existed on the burden of crisis management. As for the advantages, they argued that accession would secure our place at the “core” and would also mean access to the crisis management fund – a sum of 55 billion euros in 2014 – which is greater than the funds Hungary could alone allocate. They also highlighted the professionalism of ECB’s staff that would contribute to enhance the national staff’s knowledge.

In their 2017 study, co-authors *Nagy* and *Virág*<sup>32</sup> – and later *Virág*<sup>33</sup> and *Nagy* in 2020<sup>34</sup> – argued that while the accession to the Eurozone does not results in “automatic real convergence”, failure is inevitable if the country introduces the common currency before a given level of real convergence is reached. In order to avoid such a scenario, they elaborated on the so-called Maastricht 2.0 criteria. In their view, the following criteria should be met before the accession: GDP per capita and wage levels should reach at least 90% of the euro area; synchronised business and financial cycles as well as available, effective countercyclical political toolkit should be established; the economy should be close to full employment; advanced, stable and competitive financial sector – with some 90% convergence – should be established; and structural balance should be achieved dependent on government debt between 0 and –2% of GDP, with a debt target of 50%.

29 Csajbók and Csermely, 2002, p. 11. Translation by the author.

30 Kisgergely and Szombati, 2014, p. 30.

31 These findings on the Banking Union’s institutions were well-founded back in 2014: the chapter on the European monetary policy, which also elaborates on the shortcomings of the said institutions support these findings. However, based on the developments of the recent ten year, most of these shortcomings were addressed.

32 Nagy and Virág, 2017.

33 Virág, 2020, p. 309.

34 Nagy, 2020.

After introducing the HCB's point on the issue, one may introduce the opinion of the Hungarian scientific community. In the last 20-25 years, the fundamental premise agreed by the majority of academics – and practicing economists – was that in case of a premature, politically motivated accession without economic convergence serious economic harm is inevitable. The accession in itself does not bring real convergence as it was proved by co-authors *Neményi* and *Oblath* in their 2012 study.<sup>35</sup> The Greek Sovereign Debt Crisis proved “once and for ever” this thesis. As *Zsolt Darvas* argued in 2017, it was not the introduction of the common currency which in itself induced the serious problems in the Mediterranean countries. In his view the main problems were: insufficient demand, poor budget structure, and wage increases in excess of productivity.<sup>36</sup> Already in 2008, co-authors *Darvas* and *Szapáry* concluded<sup>37</sup> that – due to certain characteristics of the Eurozone<sup>38</sup> – common monetary policy induced the less developed member states to perform excessive borrowing.<sup>39</sup>

However, the fulfilment of the Maastricht Criteria is necessary and at the same time insufficient to reach real convergence, as *Péter Mihályi*<sup>40</sup> argued. As *Darvas* added, the Maastricht criteria are not a proper tool to measure a country's readiness for the accession. Neither are the above-cited Maastricht 2.0 criteria. In his view, the level of economic development is not so important.<sup>41</sup> On the other hand, the comparative study of co-authors *Kutasi* and *Nagy*<sup>42</sup> proves that pursuing a disciplined economic policy and reaching a level of real convergence is important even if the country does not wish to access the Eurozone. In their study they scrutinised the economic indicators of the V4 countries, i.e., how the economic performance of Slovakia – the only V4 country that adopted the euro – compares to the economic performance of countries having their own national currencies, namely Hungary, Poland, and the Czech Republic. It is worth mentioning that both the Polish and Czech central bank chiefs seem to categorically refuse the accession to the Eurozone.<sup>43</sup>

Based on the above-mentioned study of *Kutasi* and *Nagy*, the Slovakian labour force became the most expensive in the region due to the fact that Slovakia – in the lack of sovereign monetary policy – was no longer able to devalue its own currency in order to keep the Slovakian labour force cheap. Regarding price stability, they concluded that the Czech and the Hungarian national currencies' inflation rates seemed to better fit the Maastricht criteria, than the Slovakian ones. – Something that one would not expect. – In 2015–2016 Slovakia had deflation, just like Hungary

35 *Neményi* and *Oblath*, 2012, pp. 673–677.

36 *Czelleng*, 2018, p. 104.

37 *Darvas* and *Szapáry*, 2008, p. 873.

38 *Artner* and *Róna* 2012, pp. 83–102.

39 It is worth mentioning that the great availability of credits worldwide at the Millennium would have induced the Greek governments to obtain large amount of credit anyway, as *Imre Tarafás* argues. *Tarafás*, 2013, p. 362.

40 *Mihályi*, 2005, pp. 716–717.

41 *Czelleng*, 2018, p. 105.

42 *Kutasi* and *Nagy*, 2019, pp. 7–23.

43 *EJ/MD*, 2023; *King*, 2017.

and Poland in the same period. It was only the Czech Republic, which was not affected by the deflation trend. Kutasi and Nagy further argue that it was only the Slovakian debt to GDP rate that displayed growth during the examined period. When it comes to current account, they found that the common currency did not provide any advantage in this regard to Slovakia. Last, but not least they argue that the amount of Foreign Direct Investment data show almost the same trajectory in case of Hungary and Slovakia, while the Czech Republic and Poland performs better. Regarding the result of Kutasi and Nagy, the author of the current chapter would only mention that based on his own findings “government debt to GDP ratios” declined until 2019–2020 in all the V4 countries and started to grow in year 2020<sup>44</sup> – in a year that was out of the scope of the above co-authors’ study.

Co-authors Bod, Pócsik and Neszmélyi evaluated the results of the “Slovakian Euro” in a more positive way. Although they also mention the Slovak firms’ disadvantage in terms of the wage share cost compared to producers in floating currency countries, they argue that since the price of imported materials and parts fell more than that of exported goods, the improvement in the exchange rate mitigated the effects of the more expensive wages. While they acknowledge, too, that the actual benefits of euro adoption have been somewhat lower than initially expected, this may be attributed to external factors such as the global economic crisis and the prolonged crisis in the Euro area. In their view it can be even risked to state, that the *Economic and Monetary Union* (EMU) – and its strict fiscal rules – had protected the national economy from suffering grater losses from those fiscal shocks. However, membership in the Euro area is not in itself a guarantee of sustainable growth. Instead, it is the strong and longstanding commitment to the integration process and to obey its rules, which warrants the growth: disciplined economy policy minimises the risk of economic policy “slippage” and helps to avoid costly forced adjustments.<sup>45</sup>

As an interim conclusion – articulated by Darvas<sup>46</sup> and Péter Gottfried<sup>47</sup> – one may state that a country may be successful with or without euro as well. Similarly, György Surányi stated in 2012 that no country is immune to bad, irresponsible economic policies, neither as a member of the EMU nor as an outsider.<sup>48</sup>

Three further issues should be emphasised. First, Hungary’s import-export volume to the EU is already really high, it almost reached the potential maximum.<sup>49</sup> That is to say the accession to the Eurozone does not offer any room for improvement in this regard. Some also argue that the accession to the Eurozone does not offer any additional prestige value: as Gottfried wrote, we are already devoted to the EU and the NATO, thus accession to the Eurozone would not offer any such additional value. He adds, however, that Brexit eroded the possibilities of non-Eurozone members to

44 Based on the data available at the <https://tradingeconomics.com/> (Accessed: 17 December 2023).

45 Bod, Pócsik and Neszmélyi, 2020, pp. 339, 343, 345–346.

46 Czalleng, 2018, p. 105.

47 Gottfried, 2021, p. 110.

48 Hvg.hu, 2012.

49 Menich-Jónás, 2021, p. 72.; See also: Virág, 2020.



empower their interests. Also, the more countries decide to access to the Eurozone, the less power those decide to keep out will have on the long-run.<sup>50</sup> *András Vértés* argued in a very similar way: in his opinion, the main dilemma here is the fear from that 'missing out means to be left behind.'<sup>51</sup> It is also worth mentioning that *Kisgergely* and *Szombati* in their 2014 study made under the HCB's aegis also emphasised that accessing to the Eurozone would mean belonging to the core. The Brexit and its effect on the outsiders' ability to enforce their interests was emphasised in *György Surányi's* opinion as well. He, on the other hand, unlike *Gottfried*, thinks that the accession does have a prestige value:

The financial and economic crisis, the crisis in the euro area, the influx of refugees, Brexit, the election of Donald Trump, all together and clearly push the European Union in the direction of deepening cooperation between member states. In this process, a country that is unable or unwilling to come into the inner circle could be marginalised or effectively left out of the European Union.<sup>52</sup>

Second, the loss of monetary sovereignty is maybe the most often-cited argument against the introduction of the common currency, which is more often refuted by pointing on "the reality," namely that the Hungarian economy is a small and open one, therefore a fully independent monetary policy – in *György Surányi's* words – is only an "illusion." Therefore, in his view, losing it is not an unacceptable sacrifice. In the view of *István Pál Székely*, the tool of devaluation is overestimated. He argues that is only enough to buy time, but only in a limited extent, and only in order to facilitate other economic measure to solve the problem.<sup>53</sup>

Last but not least, the issue of setting the target date has to be mentioned. *Gottfried* essentially asked in his 2021 writing whether we should rush to the safe haven or should wait to see how the Eurozone evolves, and our economy performs.<sup>54</sup> As co-authors *Bod*, *Pócsik*, and *Neszmélyi* argue there is not a single date, which is from an economic point of view absolutely perfect for the accession: all calculations are questionable. Furthermore, a serious role can be played by unpredictable circumstances, or simply put: good and bad luck. That is to say, it is an issue which has to be decided by politics. This decision should not be short-sighted, however: only a political consensus over several government cycles is eligible for the success of the currency exchange and to comply with the resulting financial conditions.<sup>55</sup> In *Mihályi's* opinion, the "original sin" was committed by the subsequent Hungarian governments, when they pushed the deadline again and again inducing unfounded expectations in the economic operators and the population. They should either

50 *Gottfried*, 2021, p. 113.

51 *Czelleng*, 2018, p. 103.

52 *Hvg.hu*, 2017.

53 *Czelleng* 2018, p. 105.

54 *Gottfried*, 2021, pp. 124–125.

55 *Bod*, *Pócsik* and *Neszmélyi*, 2020, pp. 321, 323–324.

manage the introduction of the euro or tell that we will not access the Eurozone in the near future.<sup>56</sup>

#### ***1.4. A legal issue regarding the possible joining of the Eurozone***

The legislative framework of the HCB's structure and functioning is set out in the Fundamental Law of Hungary<sup>57</sup> (FLH), which in its Article 41(6) states that the detailed provisions are to be settled in a so-called cardinal act.<sup>58</sup> As *István Simon* described<sup>59</sup> the current regulatory framework on the HCB, the FLH is a so-called core constitution, which directs the Parliament to pass cardinal laws on subjects specified in it. In line with this, the HCB is regulated by cardinal act 139 of 2013 on the Magyar Nemzeti Bank<sup>60</sup> (HCB Act). Furthermore the FLH – unlike the previous Constitution<sup>61</sup> which did not contain regulations on the currency – Article K) of the FLH declares that the official currency of Hungary is the forint. As Simon argues, while the previous Constitution was neutral in terms of economic policy – as well as in other issues<sup>62</sup> –, the Fundamental Law is not. In his view, the causes of the constitutional and policy changes are rooted in the crisis situation before 2010.<sup>63</sup> Simon argues that granting constitutional status to the forint has a symbolic meaning and practical importance, i.e., the forint fulfils the functions of money in Hungary, but what is even more important is that changing the legal tender of Hungary would require the amendment of the Fundamental Law, which requires at least a two-third majority vote, thus the existence of proper democratic legitimacy. Others, however, contest this decision of the drafters: they argue that this provision runs counter to the obligations arising from the founding treaties of the European Union, since upon accessing to the EU Hungary agreed to adopt the common currency.<sup>64</sup> A quick research done on the constitutional and statutory rules of the V4 countries and Germany by the author of the current chapter revealed that the constitutions of the Czech

56 Mihályi, 2012, p. 918,

57 The Fundamental Law of Hungary (25 April 2011). Available at: <https://www.parlament.hu/documents/125505/138409/Fundamental+law/73811993-c377-428d-9808-ee03d6fb8178> (Accessed: 17 December 2023).

58 In other words: organic law.

59 Simon, 2018, pp. 113–114.

60 Act CXXXIX of 2013 on the Magyar Nemzeti Bank. Available at: <https://www.mnb.hu/letoltes/mnb-torveny-2019-04-05-en.pdf> (accessed: 17 December 2023).

61 Act XIX of 1949.

62 As József Szájer, who chaired the committee responsible for drafting the FLH, argues in his memoirs that it is a value-based constitution in other regards as well: Szájer, 2014, pp. 736–737, 774–775; see furthermore: Árva, 2022; Kiss, 2023, p. 424; Jakab, 2011, p. 379.

63 Simon 2018, p. 114.

64 Arato, Halmai and Kis, 2011.

Republic,<sup>65</sup> Poland,<sup>66</sup> Slovakia,<sup>67</sup> and Germany<sup>68</sup> do not nominate the legal tender, it is regulated in their statutes on their national banks instead. Article 13 of the Act on the Czech National Bank<sup>69</sup> states that the legal tender of the Czech Republic shall be the Czech koruna. Article 31 of the law on the Polish National Bank<sup>70</sup> states that the currency of the Republic of Poland shall be banknotes and coins denominated in złoty and grosz. Article 15(1) of the Act on the Slovakian National Bank<sup>71</sup> states that the legal tender of Slovakia is the euro. In case of Germany, the legal tender is determined in Article 14(1) of the law on the German National Bank (Bundesbank),<sup>72</sup> which reads as follows: banknotes denominated in euro shall be the sole unrestricted legal tender. Thus one may argue that the solution chosen by the drafters of the FLH is unusual – or “unorthodox” –, since even the Czechs, who are the most dismissive towards the common currency among the V4 countries,<sup>73</sup> dispensed with regulating the national currency in their constitution, which would make it impossible for a government without a qualified majority to introduce the euro, like the FLH does. The author of the current chapter is of the view that what Simon identifies as a wise regulatory choice by the drafters of the FLH is an undesirable one, instead, since once a situation may occur in which the country cannot access the Eurozone despite being mature enough in terms of real convergence and the political will of the government to do so.

As *Miroslav Štrkolec*<sup>74</sup> pointed out during his conference presentation in October 2023,<sup>75</sup> the currently enacted<sup>76</sup> Article 39a<sup>77</sup> of the Slovakian Constitution, which grants the issue of cash and the right to pay by cash, may also raise constitutional issues whenever the proposed digital Euro,<sup>78</sup> which is in a rather initial phase for the time being, will replace the “physical euro”.

65 Ústava České republiky č. 1/1993 Sb. (16. prosince 1992).

66 Konstytucja Rzeczypospolitej Polskiej (2. kwietnia 1997).

67 Ústava Slovenskej republiky (1. septembra 1992).

68 Grundgesetz für die Bundesrepublik Deutschland (23.05.1949).

69 Zákon č. 6/1993 Sb. o České národní bance.

70 Ustawa z dnia 29 sierpnia 1997 r. o Narodowym Banku Polskim.

71 Zákon 566/1992 (z 18. novembra 1992) o Národnej banke Slovenska.

72 Gesetz über die Deutsche Bundesbank in der Fassung der Bekanntmachung vom 22. Oktober 1992 (BGBl. I S. 1782), das zuletzt durch Artikel 14 Absatz 3 des Gesetzes vom 28. Juni 2021 (BGBl. I S. 2250) geändert worden ist.

73 Eurobarometer 465 18 May 2018; Republikon, 2022.

74 Professor JUDr. Miroslav Štrkolec, PhD (Univerzita Pavla Jozefa Šafárika).

75 The Interaction of National Economic Governance with The EU Integration and Contested Areas (Budapest, 26–27 October 2023).

76 Zákon 241/2023 (15. júna 2023) ktorým sa dopĺňa Ústava Slovenskej republiky č. 460/1992 Zb. v znení neskorších predpisov.

77 Article 39a: ‘(1) The issue of cash as legal tender shall be guaranteed. (2) Everyone shall have the right to make payment for the purchase of goods and the provision of services in cash as legal tender, and the acceptance of such payment may be refused only on reasonable or generally applicable grounds. The right to make a cash transaction at a bank or branch of a foreign bank shall be guaranteed. (3) The law shall lay down the conditions and limitations of the right under paragraph (2).’

78 Demertzis and Martins, 2023.

## 2. Similarities of the ECB's and the HCB's chosen path of handling the crises

### 2.1. Regulatory changes

The Eurozone in its original form featured a regulation deficit, which meant the almost complete lack of supervision authorities that could forecast potential risks and intervene in case of a crisis. There were no plans as to what to do in case of a crisis and there were no institutions vested with the power to apply fiscal rescue packages. It was a “half-built house”.<sup>79</sup> As pointed out earlier by the author,<sup>80</sup> this was the result of the founding fathers’ “original sin”: due to their political dissent, they gave up the creation of a real economic and monetary union and created an asymmetric monetary union with severe structural weaknesses instead.<sup>81</sup> These weaknesses became evident in 2010 at the wake of the Greek Sovereign Debt Crisis. Back then many economist buried the euro.<sup>82</sup>

As a response, the European legislator created the *European Banking Union* (EBU), which was proposed by several scholars years before and which became the warrantor of the EMU's stability. As *Luigi Chiarella* pointed out,<sup>83</sup> the new institutions were necessary, because the previous banking supervision and resolution framework, which was based on cooperation, failed during the crisis,<sup>84</sup> because domestic authorities were prone to turn a blind eye, when it came to their “national champions”. In accordance with the European Commission's proposal,<sup>85</sup> the EBU should have been based on multiple pillars, namely: (a) the *Single Rule Book*, (b) the *Single Supervisory*

79 A label used by *Fred Bergsten*. See Bergsten, 2012, p. 16.

80 Marinkás, 2020, p. 140; Marinkás, 2018, pp. 437–471.

81 See furthermore: Buda, 2017, p. 234; Buda, 2016, p. 22.

82 Stiglitz, 2010; Worstall, 2015.

83 Chiarella, 2016, pp. 41–46, 85.

84 This failure is well-portrayed by *advocate general Gerard Hogan's* opinion in the *Landeskreditbank Baden-Württemberg v. ECB* case: ‘[...] legislators and regulators have struggled to come to terms with the enormity of this banking crisis and to understand how, in the face of what had previously seemed to be a perfectly adequate system of regulation, that system ultimately failed when it was put to the test in those dark days of 2008 onwards.’ – C-450/17 P – *Landeskreditbank Baden-Württemberg v. ECB*, opinion of Advocate General Gerard Hogan, 5 December 2018, para. 2

85 European Commission (2012) ‘Communication from the Commission to the EP and the Council. A Roadmap towards a Banking Union’, Brussels, 12.9.2012, COM (2012) 510 final.

*Mechanism*<sup>86</sup> (SSM); (c) the *Single Resolution Mechanism*<sup>87</sup> (SRM); and the (d) *European Deposit Insurance Scheme* (EDIS).

While the last one still has not been completed, based on the reports of EU institutions and scientific literature<sup>88</sup> the author of the current article came to the conclusion in his 2020 study<sup>89</sup> that the first years of their functioning proved that the SSM and – more or less – the SRM are viable institutions despite the hardships experienced at their launch. More recent sources also support these findings: while the SSM is praised, the SRM still displays uncertainties in its functioning.<sup>90</sup>

As for the Hungarian regulatory rules, Article 41(2) of the FLH doubles the HCB's mandate: it states the HCB shall perform the supervision of the financial intermediary system. Hungary did not establish a so-called close cooperation with the ECB, but the HCB is obliged to cooperate with the ECB and the entities of the Banking Union, since the HCB is a member of the European System of Central Banks and the European System of Financial Supervision. With a view to this membership, the HCB shall perform the tasks imposed on it by the European Banking Authority, the European Insurance and Occupational Pensions Authority, the European Securities and Markets Authority, and the European Systemic Risk Board.<sup>91</sup> The HCB shall cooperate in the supervision of financial intermediation with the European Commission and the entities of the Banking Union, including the Central Banks of other Member States as well.<sup>92</sup> The HCB cooperates furthermore with the European Systemic Risk Board in performing its duties related to macro-prudential policy for

86 Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions (OJ L 287, 29.10.2013, pp. 63–89) (*SSM Regulation*).

87 Regulation (EU) No 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010 (OJ L 225, 30.7.2014, pp. 1–90) (*SRM Regulation*).

88 European Commission (2019) 'The Report from the Commission to the European Parliament and the Council on the application and review of Directive 2014/59/EU (Bank Recovery and Resolution Directive) and Regulation 806/2014 (Single Resolution Mechanism Regulation)', Brussels, 30.4.2019, COM (2019) 213 final p. 15; ECA (2016) 'Single Supervisory Mechanism – Good start but further improvements needed', Special Report No. 29, p. 136.; ECA (2017) 'Single Resolution Board: Work on a challenging Banking Union task started, but still a long way to go', Special report No. 23/2017, p. 68.; Karagianni and Scholten, 2018, pp. 185–194.

89 Marinkás, 2020, p. 140.

90 European Commission, Report from the Commission to the European Parliament and the Council on the Single Supervisory Mechanism Established Pursuant to Regulation (EU) No. 1024/2013. Strasbourg, 18.4.2023 COM (2023) 212 final; Avgeri, et al., (2020), p. 34., Culpepper and Tesche, 2020, pp. 134–150; Smoleńska, 2022, pp. 42–53; See furthermore the author's analysis on the T-510/17 *Antonio Del Valle Ruiz v. European Commission and Single Resolution Board* and T-481/17 *Fundación Tatiana Pérez [...] v. SRB* cases in the book 'Economic Governance – Fiscal and Monetary Policy of Central European Countries', Central European Academic Publishing 2024 (in publication).

91 Under Article 1(1) (3) of the HCB Act.

92 Under Article 140(1) regarding the duties set out in Article 4(9) of the HCB Act.

the stability of the entire system of financial intermediation,<sup>93</sup> and cooperates with the European Banking Authority in respect to its tasks as a resolution authority<sup>94</sup> as defined by a separate act.<sup>95</sup> The HCB shall meet notification, data and information supply requirements of the above authorities.<sup>96</sup>

## 2.2. Crisis management tools

The change in the ECB's director seat in 2011 gave an impetus to the already ongoing policy shift: while *Jean-Claude Trichet* insisted that the restrictive dispositions of the TFEU – namely the “no bailout”<sup>97</sup> and “no default”<sup>98</sup> assumptions – shall be kept under all circumstances, the new president Mario Draghi held his famous “whatever it takes”<sup>99</sup> speech in 2012 giving the green light to the *Outright Monetary Transactions*<sup>100</sup> and the other purchase programs. As *Isabel Schnabel*<sup>101</sup> concluded:

the reforms that followed the global financial crisis of 2008 have made our financial system safer and more resilient. Tighter regulation and higher capital ratios have been key factors enabling banks to act as shock absorbers rather than shock amplifiers during the coronavirus (COVID-19) pandemic.<sup>102</sup>

It is interesting to compare the communication from the HCB, which hit a very similar tone: by the time serious negative economic effects of the COVID-19 crisis started to hit the Hungarian economy, the HCB's targeted measures have helped to put the Hungarian economy on a sustainable catching-up path, while also strengthening the economy's immune system, according to György Matolcsy.<sup>103</sup> In the words of co-authors *Csortos* and *Nagy-Kékesi* the HCB has sufficient “firepower” to deal with

93 As set out by Article 4(7) of the HCB Act.

94 Article 4(15) of the HCB Act: ‘In performing the function provided for in Paragraph (8), adequate arrangements shall be in place to ensure operational independence of the department responsible for enforcement of resolution functions from other departments of the MNB, including that these functions must be performed under the direct control and supervision of the governor or any of the deputy governors of the MNB’.

95 Act XXXVII of 2014 on the further development of the system of institutions strengthening the security of the individual players of the financial intermediary system (Resolution Act).

96 Article 140 (3)–(12) contain detailed provisions on the HCB's obligations to notify the above entities.

97 Consolidated version of the Treaty on the Functioning of the European Union, *OJ C* 326, 26.10.2012, pp. 47–390, Article 125.

98 *Ibid*, Article 9.

99 ‘Within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough.’ ECB (2012) Speech by Mario Draghi, President of the European Central Bank at the Global Investment Conference in London, 26 July 2012. Verbatim of the remarks made by Mario Draghi. Available at: <https://www.ecb.europa.eu/press/key/date/2012/html/sp120726.en.html> (Accessed: 17 December 2023).

100 Cœuré, 2013.

101 Member of the Executive Board of the European Central Bank (Incumbent from 1 January 2020).

102 Schnabel, 2020.

103 Matolcsy, 2020, pp. 13–35.

the challenges posed by the COVID-19 epidemic.<sup>104</sup> As for the HCB's chosen method of handling the Eurozone crisis, *Csaba Lentner* provides a good oversight of the pre-crisis monetary policy of the HCB and how the HCB changed its perception on its role during the handling of the Eurozone crisis:<sup>105</sup> the HCB reduced the base rate from 7.0% to 0.9% and kept it at that level between 2012 and 2019;<sup>106</sup> launched the *Funding for Growth Scheme* (Növekedési Hitelprogram, hereafter: FGS);<sup>107</sup> the *Self Financing Programme* (Önfinanszírozási program, hereafter: SFP) in the middle of 2014 to reduce external vulnerability; phased out household loans denominated in foreign currencies, which also reached an unhealthy level, thus enhancing the vulnerability of the country's economy.<sup>108</sup> While Lentner argues that the HCB's crisis management was a great success for many reasons, *László Csaba* argues that the success is highly attributable to external, one-time factors, including low global energy prices, growth recovery in the EU, and sustaining zero bound interest rate on global capital markets. In his view, it is hard not to see how European trends are followed by Hungarian ones: when the EU entered into a recession in 2011–12, Hungary followed.<sup>109</sup> Similarly: in 2013–17 when Europe recovered, Hungary also recovered.<sup>110</sup>

Also, the chosen path of handling the negative effects of the COVID-19 pandemic and the Russo-Ukrainian War by the ECB and the HCB show similarities due to inevitable economic necessities:<sup>111</sup> contrary to the disinflation trends of the COVID-19 crisis, which required low or near zero interest rates and quantitative easing, the challenges of the new crisis characterised by high inflation rates required a return to the “good old” restrictive monetary policy with high interest rates and abandoning the refinancing role.

At the onset of the COVID-19 pandemic, *Christine Lagarde*, the President of the European Central Bank<sup>112</sup> stated that ‘Extraordinary times require extraordinary action. There are no limits to our commitment to the euro.’<sup>113</sup> The Pandemic

104 Csontos and Nagy-Kékesi, 2020.

105 Lentner, 2021, pp. 103–116.

106 Data available at the ‘Policy rate and interest rate corridor’ page at the HCB’s website: <https://www.mnb.hu/en/monetary-policy/monetary-policy-instruments/policy-rate-and-interest-rate-corridor> (Accessed: 17 December 2023).

107 Documents related to the programme are available at the HCB’s website: <https://www.mnb.hu/en/monetary-policy/funding-for-growth-scheme-fgs> (Accessed: 17 December 2023).

108 Hoffmann, Kolozsi and Nagy, 2014.

109 Except for the banking sector, which in Hungary remained solid.

110 Csaba, 2022, pp. 5, 8, 10.

111 See: The Magyar Nemzeti Bank’s self-financing programme April 2014 – March 2015. Available at: <https://www.mnb.hu/letoltes/the-magyar-nemzeti-bank-s-self-financing-programme-april-2014-march-2015.pdf> (Accessed: 17 December 2023).

112 Incumbent since 2019.

113 Navaratnam, 2020.

Emergency Purchase Programme (PEPP)<sup>114</sup> was such an answer with an initial envelope amounting to 750 billion euros.<sup>115</sup> The PEPP has been increased and extended twice in terms of amount and duration, reaching 1850 billion euros.<sup>116</sup> On 16 December 2021, the Governing Council of the ECB decided to discontinue net asset purchases under the PEPP by the end of March 2022. In response to the COVID-19 pandemic, the HCB decided to modify its monetary policy instruments and defined three objectives: first to provide adequate liquidity to the banking system and financial markets in keeping up with the maintenance of price stability and financial stability. Second, to allow more flexibility in short-term yields in response to the negative money market developments induced by the coronavirus pandemic, and, last but not least, to ensure that the HCB is able to shape and influence long-term yields, which have gained increasing importance in recent years, directly and on as many relevant markets as possible.<sup>117</sup> The HCB reduced the policy rate and provided long-term liquidity: it temporarily suspended penalization for breach of reserve requirements,<sup>118</sup> enhanced the “good old” FGS and the relatively new *Bond Funding for Growth Scheme* (Növekedési Kötvényprogram, hereafter: BGS).<sup>119</sup> The HCB also enhanced its asset purchase programs<sup>120</sup> (APPS): while before the pandemic, the HCB had purchased securities for about 1.2% of GDP, during the pandemic till end-2021 – when these programs expired – the HCB bought bonds for an additional 9.1% of GDP, most of them was government securities.<sup>121</sup>

As a result of the economic hardships caused by Russo-Ukrainian War, in July 2022 – the first time ever in the previous 6 years – the ECB increased its fixed interest

114 Decision (EU) 2020/440 of the European Central Bank of 24 March 2020 on a temporary pandemic emergency purchase programme (ECB/2020/17), OJ L 91, 25.3.2020, p. 1–4; For the ECB’s Summary please visit: The ECB’s summary on the Decision (EU) 2020/440 and related issues. Available at: <https://www.ecb.europa.eu/mopo/implement/pepp/html/index.en.html> (Accessed: 17 December 2023).

115 While the first response to the pandemic on 12 March 2020 included the announcement of an additional envelope of 120 billion euros under our regular asset purchase programme (APP), it quickly became clear that the APP was not an adequate tool to deal with the sudden and severe dislocations in euro area bond markets when the crisis hit with full force. – Schnabel, 2021.

116 ECB Press Release (10 December 2020) Monetary policy decisions. Available at: <https://www.ecb.europa.eu/press/pr/date/2020/html/ecb.mp201210~8c2778b843.en.html> (accessed: 17 December 2023).

117 HCB, 50 Proposals of the Magyar Nemzeti Bank to Address the Impacts of the Coronavirus Pandemic on the Economy, 29 September 2020. Available at: <https://www.mnb.hu/letoltes/50-proposals-of-the-magyar-nemzeti-bank.pdf> (Accessed: 17 December 2023).

118 HCB, 2020, p. 20.

119 Supplementing its present set of unconventional monetary policy instruments, from mid-2019, the MNB will launch a corporate bond purchase programme with a facility amount of HUF 300 billion, within the scope of which it will buy the bonds of non-financial corporations of good credit rating. Furthermore, within the scope of the scheme, it will also be possible to purchase securities backed by corporate loans, through which the MNB wishes to contribute to the spread of securitisation in Hungary. – HCB, 2020, p. 22.

120 HCB, 2020, pp. 22–24.

121 Delgado and Gravelle, 2023, p. 36.



rate to 0.5 percent. In the next period the ECB increased the interest rates almost monthly. By June 2023 the rate reached 4 percent, the highest since the beginning of the global financial crisis in 2007.<sup>122</sup> The ECB's other tool of tackling inflation was the phasing out of the net purchase programs.<sup>123</sup> Based on statistical data, these tools seems to work.<sup>124</sup> The HCB taking into account its primarily objective, i.e., price stability, restricted its purchase programs – leaving them as an exceptional tool – and decided to raise the base rate with 1% from 3,40% to 4,40% from February to March 2022. By September 2022, it reached 13% and remained at the peak until October 2023, when the Monetary Council decided to cut the base rate to 12,25% due to the improving economic situation.<sup>125</sup>

### 3. Summary and conclusions

In the first part, the author examined four issues regarding the “Hungarian Euro”. First the author introduced the opinions of high-ranking officials on the euro in the last twenty years. In this regard one may conclude that – as a former governor of the Hungarian Central Bank articulated it –, there was an optimistic atmosphere before the accession to the EU and even in the first years of Hungary's EU membership. However, due to the undisciplined economic governance the original target date became unsustainable and after the change in the government in 2010 tackling the issues of the ongoing economic crisis became more important. The issue of joining the Eurozone was taken off from the agenda. In 2023, high-ranking officials started to talk about it, although this does not mean that Hungary has an official target date. Second, the author introduced convergence reports between 2004 and 2022 and concluded that while it was unrealistic to hope the accession before 2014, between 2014 and 2020 Hungary would have had the opportunity to fulfil Maastricht criteria and access the Eurozone with some extra effort exerted. However, this was not among the government's plans based on Mihály Varga' 2017 statement. Third, the author examined the “evolution” of the Hungarian scientific community's opinion throughout the decades. In this regard the author concludes that the initial mild optimism – before and around the time of the country's accession to the EU – started to erode as an increasing number of voices warned of the “risks and undesired effects” of the common currency. While the early opinions suggested that accession may facilitate economic growth and convergence, as soon as the lessons from the

122 Statista, 2023.

123 Panetta, 2022.

124 Trading Economics, 2023.

125 Minutes of the monetary council meeting 26 September 2023. Available at: <https://www.mnb.hu/letoltes/roviditett-jegyzokonyv-a-monetaris-tanacs-2023-szeptember-26-i-uleserol-en.pdf> (Accessed: 17 December 2023).

Greek sovereign debt crisis were concluded, namely the risks of premature accession, a more realistic approach, namely the “real convergence first” became dominant. In the author’s view, the Greek sovereign debt crisis was clearly the turning point in this regard. Also, later studies came to the conclusion that a country may achieve economic growth with or without the euro as well: while the introduction of euro may not protect the country from negative economic trends, a country with its own currency may outperform those with the common currency. That is to say, the introduction of the common currency in itself does not grant economic success. Gottfried essentially asked in his 2021 writing whether we should rush to the “safe haven” or wait to see how the Eurozone evolves, and our economy performs. He suggested the latter option. In the author’s view, we should have turned our ship towards the safe haven, when we had the opportunity, since it seems for the author that our ship was washed farther away from the safe haven by the currents and the author wonders when it will be in close sight again. Fourth, the author examined a legal issue regarding the possible joining to the Eurozone, namely the choice of the drafters of the Fundamental Law to grant constitutional rank to the forint as the legal tender of Hungary, i.e., the introduction of the euro would require the amendment of the Fundamental Law. Such an amendment requires at least a two-third majority vote, thus the existence of proper democratic legitimacy. The author of the current chapter is of the view that what others identify as a wise regulatory choice is an undesirable one instead, since once a situation may occur in which the country cannot access the Eurozone despite being mature enough in terms of real convergence and the political will of the government to do so.

In the second part, the author provided a brief introduction of the “post Eurozone crisis” regulatory choices of the EU and the Hungarian legislator and also a comparison of the chosen crisis management of the ECB and the HCB related to three crises, namely: the Euro-zone crisis, the COVID-19-related crisis and the Russo-Ukrainian War-related crisis. In this regard the author draws two conclusions. First, the Banking Union’s supervisory institutions matured rather well despite certain still existing shortcomings in the SRM’s functioning. Thus, the earlier arguments in the studies issued under the aegis of the HCB, that the rules and the functioning of the Banking Union are unclear and unpredictable are obsolete for the time being. Second, due to inevitable economic necessities, the chosen crisis management tools are rather similar in case of the ECB and the HCB: during the Euro crisis both applied low interest rates and quantitative easing. The disinflation trends of the COVID-19 crisis also required these policy choices from both institutions. The challenges of the crisis induced by the Russo-Ukrainian War, characterised by high inflation rates required a return to the “good old” restrictive monetary policy with high interest rates and abandoning the refinancing role. In this regard only the base rate differs: the HCB set a bit more than three times higher base rate compared to that set by the ECB. In this regard, one may conclude that, while the HCB successfully helped the economy to tackle the economic issues and the independent monetary policy may have facilitated a crisis management tailored to the country’s needs, it is hard

not to see the similarities of its monetary policy choices with those implemented by the ECB. In the author's view, this proves that such a small and opened economy as Hungary is cannot pursue an entirely independent monetary policy, as it was emphasised by a former governor of the HCB.

## References

- Arato, A., Halmai, G., Kis, J. (2011) *Opinion on the Fundamental Law of Hungary*, June 2011 [Online] Available at: <https://lapa.princeton.edu/hosteddocs/amicus-to-vc-english-final.pdf> (Accessed: 17 December 2023).
- Artner, A., Róna, P. (2012) 'Euros(z)kepeség: Az optimális valutaövezet elmélete és az euró gyakorlata', *Közgazdaság* 2012/1, pp. 83–102.
- Árva, Zs. (2022) *Nagykommentár Magyarország Alaptörvényéhez*. Budapest, Wolters Kluwer.
- Avgeri, I., Dendramis, Y., Louri, H. (2020) 'The Single Supervisory Mechanism and its implications for the profitability of European banks', *Bank of Greece Working Paper*, 284.
- Balassa, B. (1961) *The Theory of Economic Integration*, Homewood: R. D. Erwin.
- Bod, P.Á., Pócsik, O., Neszmélyi, Gy.I. (2020) 'Az euró és a szlovák gazdaság', *Közgazdasági Szemle*, 67, pp. 321–351
- Buda, L. (2016) *Analysis of the Structural Problems of the Euro Area through Economic Impossible Trinities*. PhD Dissertation Thesis Booklet. [Online]. Available at: [https://antk.uni-nke.hu/document/akk-uni-nke-hu/buda\\_lorina\\_ten.pdf](https://antk.uni-nke.hu/document/akk-uni-nke-hu/buda_lorina_ten.pdf) (Accessed: 17 December 2023).
- Buda, L. (2017) *Az euróövezet szerkezeti problémáinak elemzése közgazdasági lehetetlenségi tételeken keresztül*. Doktori (PhD) értekezés, Budapest.
- Chiarella, L. (2016) 'The Single Supervisory Mechanism: the Building Pillar of the European Banking Union', *University of Bologna Law Review*, 1(1), pp. 34–90.
- Cœuré, B. (2013) 'Outright Monetary Transactions. One Year On', *Speech at the conference 'The ECB and its OMT programme'*, 2 September 2013 [Online]. Available at: <https://www.ecb.europa.eu/press/key/date/2013/html/sp130902.en.html> (Accessed: 29 September 2023).
- Csaba, L. (2022) 'Unorthodoxy in Hungary: an Illiberal Success Story?', *Post-Communist Economies*, 34(1), pp. 1–14 [Online]. Available at: <https://doi.org/10.1080/14631377.2019.1641949> (Accessed: 17 December 2023).
- Csajbók, A., Csermely, Á. (eds.) (2002) 'Adopting the Euro in Hungary: Expected Costs, Benefits and Timing', *NBH – Occasional Papers*, 24.
- Csontos, O., Nagy-Kékesi, Zs. (2020) 'Mi tartotta szárazon az MNB puszkaporát? – A jegybanki mérleg mozgástere', *Portfolio.hu*, 27 May 2020 [Online]. Available at: <https://www.mnb.hu/letoltes/csontos-orsolya-nagy-kekesi-zsuzsa-mi-tartotta-szarazon-az-mnb-puszkaporat-a-jegybanki-merleg-mozgastere.pdf> (Accessed: 17 December 2023).
- Culpepper, P., Tesche, T. (2020) 'Death in Veneto? European banking union and the structural power of large banks', *Journal of Economic Policy Reform*, 24(2), pp. 134–150.
- Czelleng, Á. (2018) 'Az Euró bevezetése Magyarországon – Az euró bejövetele a magyarokhoz. A 25 éves GKI születésnap konferenciája. Budapest, 2017. november 22.', *Közgazdasági Szemle*, 65, pp. 102–106.
- Darvas, Zs., Szapáry, Gy. (2008) 'Az euróövezet bővítése és euróbevezetési stratégiák', *Közgazdasági Szemle*, 55(10), pp. 833–873.
- Delgado, M., Gravelle, T. (2023) 'Central bank asset purchases in response to the Covid-19 crisis', Report prepared by a CGFS Working Group, *CGFS Papers*, 2023/68, March 2023.
- Demertzis, M., Martins, C. (2023) 'The value added of central bank digital currencies: a view from the euro area', *Bruegel Policy Brief*, 12 June 2023 [Online]. Available at: <https://www.bruegel.org/policy-brief/value-added-central-bank-digital-currencies-view-euro-area> (Accessed: 17 December 2023).

- Demertzis, M., Martins, C. (2023) The value added of central bank digital currencies: a view from the euro area. Bruegel Policy Brief 12 June 2023. [Online]. Available at: <https://www.bruegel.org/policy-brief/value-added-central-bank-digital-currencies-view-euro-area> (Accessed: 17 December 2023).
- ECB (2004) *Convergence Report* [Online]. Available at: <https://www.ecb.europa.eu/pub/pdf/conrep/cr2004en.pdf> (Accessed: 17 December 2023).
- ECB (2010) *Convergence Report* [Online]. Available at: <https://www.ecb.europa.eu/pub/pdf/conrep/cr201005en.pdf> (Accessed: 17 December 2023).
- ECB (2014) *Convergence Report* [Online]. Available at: [https://ec.europa.eu/economy\\_finance/publications/european\\_economy/2014/pdf/ee4\\_en.pdf](https://ec.europa.eu/economy_finance/publications/european_economy/2014/pdf/ee4_en.pdf) (Accessed: 17 December 2023).
- ECB (2020) *Convergence Report* [Online]. Available at: <https://www.ecb.europa.eu/pub/pdf/conrep/ecb.cr202006~9f8c8d4c0.en.pdf> (Accessed: 17 December 2023).
- ECB (2022) *Convergence Report* [Online]. Available at: <https://www.ecb.europa.eu/pub/convergence/html/ecb.cr202206~e0fe4e1874.en.html> (Accessed: 17 December 2023).
- EJ/MD (2023) 'Central bank chief describes Polish euro adoption as "deeply harmful"', *Thefirstnews.com*, 5 January 2023 [Online]. Available at: <https://www.thefirstnews.com/article/central-bank-chief-describes-polish-euro-adoption-as-deeply-harmful-35602> (Accessed: 17 December 2023).
- HCB (2020) *Monetary Policy Instruments of the Magyar Nemzeti Bank During the COVID-19 Crisis: Liquidity, Safety, Flexibility*, May 2020 [Online]. Available at: <https://www.mnb.hu/letoltes/jegybanki-eszkozta-2020-covid19-en.pdf> (accessed: 17 December 2023).
- Heinrich, M. (2023) 'Hungary central-bank chief sees chance for euro adoption only after 2030', *Reuters*, 2 June 2023 [Online]. Available at: <https://www.reuters.com/markets/europe/hungary-cbank-chief-sees-chance-euro-adoption-only-after-2030-2023-06-02/> (Accessed: 17 December 2023).
- Hoffmann, M., Kolozsi, P.p., Nagy, M. (2014) 'A forintosítás időben elnyújtva csökkenti a jegybank mérlegét és így a forintlikviditást', *Portfolio.hu*, 8 December 2014 [Online]. Available at: <https://www.portfolio.hu/bank/20141208/devizahitelek-forintositasa-elbirjak-a-bankok-207430> (accessed: 17 December 2023).
- Hvg.hu (2012) *Surányi: kell a magyar euró, de nem túl gyorsan*, 15 July 2012 [Online]. Available at: [https://hvg.hu/gazdasag/20120615\\_suranyi\\_euro](https://hvg.hu/gazdasag/20120615_suranyi_euro) (Accessed: 17 December 2023).
- Hvg.hu (2017) *Surányi: Eurónélkül kimaradunk az unió belső köréből*, 07 September 2017 [Online]. Available at: [https://hvg.hu/gazdasag/20170907\\_Suranyi\\_Euro\\_nelkul\\_kimaradunk\\_az\\_unio\\_belső\\_köréből](https://hvg.hu/gazdasag/20170907_Suranyi_Euro_nelkul_kimaradunk_az_unio_belső_köréből) (Accessed: 17 December 2023).
- Jakab, A. (2011) *Az új Alaptörvény keletkezése és gyakorlati következményei*. Budapest: HVG-Orac.
- Karagianni, A., Scholten, M. (2018) 'Accountability Gaps in the Single Supervisory Mechanism (SSM) Framework', *Utrecht Journal of International and European Law*, 34(2), pp. 185–194 [Online]. Available at: <http://doi.org/10.5334/ujel.463> (Accessed: 17 December 2023).
- Kenessei, A. (2022) 'Lesz valaha magyar euró? Múltidéző interjúk, 4. rész: Bartha Ferenc', *Menedzsment Fórum*, 26 December 2022 [Online]. Available at: <https://mfor.hu/cikkek/tortenelem/lesz-valaha-magyar-euro-multidezo-interjuk-4-resz-bartha-ferenc.html> (Accessed: 17 December 2023).
- Kenessei, A. (2023) 'Lesz valaha magyar euró? Múltidéző interjúk, 6. rész: Bod Péter Ákos', *Menedzsment Fórum*, 14 January 2023 [Online]. Available at: <https://mfor.hu/cikkek/tortenelem/lesz-valaha-magyar-euro-multidezo-interjuk-6-resz-bod-peter-akos.html> (Accessed: 17 December 2023).

- King, L. (2017) 'Czech central bank governor not betting on euro adoption in next decade', *Reuters*, 14 June 2017 [Online]. Available at: <https://www.reuters.com/article/czech-euro-cenbank-idUSL8N1JB4U7> (Accessed: 17 December 2023).
- Kisgergely, K., Szombati, A. (2014) 'Bankunió magyar szemmel – hogyan látja az MNB a szoros együttműködés lehetőségét?' *MNB-tanulmányok*, 115.
- Kiss B. (2023) *Útmutató az Alaptörvényhez*. Budapest, HVG-Orac.
- Kutasi, G., Nagy, S. Gy. (2019) 'Euróval vagy anélkül könnyebb újraindítani Kelet-Közép-Európát? Restart of East Central Europe: with or without euro?' *Európai Tükör*, 2019/4., pp. 7–23 [Online]. Available at: <https://doi.org/10.32559/et.2019.4.1> (Accessed: 17 December 2023).
- Lentner, Cs. (2021) 'Outline of the evolution of the hungarian monetary policy from the restoration of the two-level banking system to the present day', *Public Governance, Administration and Finances Law Review*, 6(1), pp. 103–116.
- Marinkás, Gy. (2018) 'How not to build a Monetary Union? The structural weaknesses of the EMU in the light of the 2008 crisis and the institutional reforms for their correction', *Hungarian Yearbook of International Law and European Law*, 6, pp. 437–471.
- Marinkás, Gy. (2020) 'What if a new crisis comes? – In other words, is the EMU prepared for another possible financial crisis?' in: Blažo, O., Mokrá, L., Máčaj, Á. (eds) *Symposia, colloquia, conferences; Bratislava Legal Forum 2020 Legal Challenges For The New European Commission; Collection of Papers of the Academic Conference organized by Comenius University in Bratislava, Faculty of Law on 6th and 7th February 2020 in the Premises of Comenius University in Bratislava, Faculty of Law*, Bratislava: Comenius University in Bratislava, Faculty of Law 2020, pp. 54–66.
- Matolcsy, Gy. (2020) 'Quo vadis Hungaria? – Arcul egy új világ felé' *Polgári Szemle*, 16(1–3), pp. 13–35 [Online]. Available at: <https://doi.org/10.24307/psz.2020.0703> (Accessed: 17 December 2023).
- Menich-Jónás J. (2021) 'Az Euro bevezetése Magyarországon. *Acta Periodica*, 22, pp. 59–78 [Online]. Available at: <https://doi.org/10.47273/ap.2021.22.59-78> (Accessed: 17 December 2023).
- Mihályi P. (2005) 'Jó úton járunk? Magyarország euróstratégiája', *Közgazdasági Szemle*, 52(7–8), pp. 712–731.
- Mihályi, P. (2012) 'Az euró magyarországi bevezetése – múlt és jövő', *Közgazdasági Szemle*, 59, pp. 917–922.
- MTI (2017) 'Varga: direkt nem teljesítjük az euróbevezetés minden feltételét', *hvg.hu*, 22 July 2017. [Online] Available at: [https://hvg.hu/gazdasag/20170622\\_Varga\\_direkt\\_nem\\_teljesitjuk\\_az\\_eurobevezetes\\_minden\\_feltetelet](https://hvg.hu/gazdasag/20170622_Varga_direkt_nem_teljesitjuk_az_eurobevezetes_minden_feltetelet) (Accessed: 17 December 2023).
- Mundell, R.A. (1960) 'A Theory of Optimum Currency Areas', *American Economic Review*, 51(4), pp. 657–665.
- Nagy, M. (2020) 'Sustainable Convergence Achieved Using the Euro: Maastricht 2.0', *Növekedés*, 21 January 2020 [Online]. Available at: <https://novekedes.hu/english/sustainable-convergence-achieved-using-the-euro-maastricht-2-0> (Accessed: 17 December 2023)
- Nagy, M., Virág, B. (2017) 'Felzárkózás az eurózónában – Csakis megfelelő felkészültséggel teljesíthető', *Portfolio.hu*, 16 October 2017 [Online]. Available at: <https://www.portfolio.hu/gazdasag/20171026/felzarkozas-az-eurozonaban-csakis-megfelelo-felkeszultseggel-teljesitheto-266155> (Accessed: 17 December 2023)
- Navaratnam, S. (2020) 'ECB's commitment to the euro has "no limits"', *Reuters*, 19 March 2020 [Online]. Available at: <https://www.reuters.com/article/health-coronavirus-ecb-lagarde-idINF9N29R018> (Accessed: 17 December 2023).

- Neményi, J., Oblath, G. (2012) 'Az euró bevezetésének újragondolása', *Közgazdasági Szemle*, 59(6), pp. 569–684.
- Neszmélyi, Gy.I., Pócsik, O. (2021) 'Dilemmas of Hungary's Accession to the Eurozone. Part II.: Pros and Cons of the Weak National Currency, the Hungarian Macroeconomic Environment and the Scheduling of the Adoption of Euro'. *Magyar Tudomány* 182(5), pp. 635–651 [Online]. Available at: <https://doi.org/10.1556/2065.182.2021.5.7> (Accessed: 17 December 2023).
- Panetta, F. (2022) 'Europe as a common shield: protecting the euro area economy from global shocks', *Keynote Speech at the European Parliament's Innovation Day, The EU in the World created by the Ukraine War*, Brussels, 1 July 2022 [Online]. Available at: <https://www.ecb.europa.eu/press/key/date/2022/html/ecb.sp220701~254252d76e.en.html> (Accessed: 9 October 2023).
- Rádai, B. (2023) 'Varga Mihály: Az euró nem csodaszor', *Index*, 24 July 2023 [Online]. Available at: <https://index.hu/gazdasag/2023/07/24/varga-mihaly-interju-vilaggazdasag-inflacio-forint-euro-dollar/> (Accessed: 17 December 2023).
- Republikon (2022) 'Az euró bevezetésének támogatottsága Magyarországon nemzetközi összehasonlításban', *A Republikon Intézet elemzése*, January 2022 [Online]. Available at: <http://republikon.hu/media/106472/republikon-22-02-08-euro.pdf> (Accessed: 17 December 2023).
- Schnabel, I. (2020) 'COVID-19 and the liquidity crisis of non-banks: lessons for the future. Speech by Isabel Schnabel, Member of the Executive Board of the ECB', *Financial Stability Conference on "Stress, Contagion, and Transmission"*, Frankfurt am Main, 19 November 2020 [Online]. Available at: [https://www.ecb.europa.eu/press/key/date/2020/html/ecb.sp201119\\_1~4a1ff0daf9.en.html](https://www.ecb.europa.eu/press/key/date/2020/html/ecb.sp201119_1~4a1ff0daf9.en.html) (Accessed: 29 September 2023).
- Simon, I. (2018) 'The Transformation of the Hungarian Fiscal and Monetary Constitution', *Annales Universitatis Scientiarum Budapestinensis de Rolando Eotvos Nominatae: Sectio Iuridica* 57, pp. 113–139.
- Sipos, I (2019) 'A vállalkozók szerint már jövőre jöhetne a magyar euro', *Infostart*, 2 January 2019. [Online]. Available at: <https://infostart.hu/gazdasag/2019/01/02/mar-jovore-johetne-a-magyar-euro> (Accessed: 17 December 2023).
- Smoleńska, A. (2022) 'Multilevel Cooperation in the EU Resolution of Cross-border Bank Groups: Lessons from the Non-euro Area Member States Joining the Single Resolution Mechanism (SRM)', *Journal of Banking Regulation*, 23, pp. 42–53.
- Statista (2023) *Fluctuation of the European Central Bank fixed interest rate from 2008 to 2023* [Online]. Available at: <https://www.statista.com/statistics/621489/fluctuation-of-fixed-rate-interest-rates-ecb/> (Accessed: 17 December 2023).
- Stiglitz, J.E. (2010) 'Can the Euro be Saved?', *Project Syndicate*, 5 May 2010 [Online]. Available at: <https://www.project-syndicate.org/commentary/can-the-euro-be-saved?barrier=accesspaylog> (Accessed: 17 December 2023)
- Szájer, J. (2014) *Szabad Magyarország, szabad Európa újabb tizenöt év. Beszéddek, írások, dokumentumok 1998–2013*. Budapest: Magánkiadás.
- Tarafás, I. (2013) 'Az euró – vélt és valódi gyengeségek', *Közgazdasági szemle*, 60(3), pp. 359–364.
- Trading Economics (2023) *Euro Area Inflation Rate* [Online]. Available at: <https://tradingeconomics.com/euro-area/inflation-cpi> (Accessed: 17 December 2023).
- Virág, B. (ed.) (2020) *Long-term sustainability and the euro – How to rethink the Maastricht criteria?* Veszprém: Prospektus Kft.

Worstell, T. (2015) 'Both Krugman And Friedman Said The Euro Was A Stupid Idea: But They Did It Anyway, Didn't They?', *Forbes*, 6 July 2015. [Online]. Available at: <https://www.forbes.com/sites/timworstell/2015/07/06/both-krugman-and-friedman-said-the-euro-was-a-stupid-idea-but-they-did-it-anyway-didnt-they/#5a3b9f520e81> (Accessed: 17 December 2023).