

Arne Hansen, Dirk Meyer

ANFA – National Money Creation as an Existential Threat to the Currency Union?

The recent publication of the previously secret Agreement on Net Financial Assets (ANFA) directed the public's attention to the possibility that national central banks could create money through purchases of securities on their own account. This paper provides an overview of the legal foundations for ANFA and shows the varying extent to which the member countries use these regulations. What are the interests, risks and consequences for the countries in crisis and the currency union as a whole? Is the ECB properly monitoring ANFA purchases? Could money creation via ANFA act as an explosive device for the currency union?

An important characteristic of the Economic and Monetary Union (EMU) in terms of regulatory policy is its decentralised federal structure in the presence of centralised executive authority. As the highest decision-making body, the Governing Council of the European Central Bank (ECB) consists of the Executive Board and the governor of each national central bank (NCB). Many tasks are shared between the ECB and the NCBs, for example banking supervision, ensuring financial stability and statistical data collection. The distinction between the common monetary policy measures of the Eurosystem, which are implemented by the ECB and which fall under its responsibility, and the non-monetary policy operations conducted by the national central banks of the euro member states at their own initiative and on their own behalf, is also a special feature of the EMU.¹

The publication of the (previously secret) Agreement on Net Financial Assets (ANFA) protocol drew the public's attention to the possibility for national central banks to create money through purchases of securities on their own behalf, a practice of which little notice had hitherto

been taken. This paper provides an overview of the legal foundations and shows the varying extent to which these regulations are used by the member states. What are the interests, risks and consequences for the countries in crisis and the currency union as a whole? Could this quasi-national additional money act as an explosive device for the EMU by violating the principle of congruence between the money-receiving and money-emitting communities?

Agreement on Net Financial Assets (ANFA)

The secret ANFA protocol is a contractual agreement governing net financial assets (NFA) between the 19 national central banks and the ECB.² It contains rules and determines ceilings for securities holdings which the national central banks may independently acquire. Article 14.4 of ECB Protocol No. 4 provides the legal basis for such equity investment activities. It permits the national central banks to exercise "other functions" on their own responsibility and at their own cost and risk in the scope of the securities purchases under ANFA. These can include investments related to currency reserves and employee pension funds/pension reserves of the national central bank, the counterpart item to statutory capital and reserves, as well as serving general investment purposes. Deposits by governments and international institutions are also included. By providing central bank money, the national central bank concerned creates money on its

1 See, for example Deutsche Bundesbank: Zur Bedeutung und Wirkung des Agreement on Net Financial Assets (ANFA) für die Implementierung der Geldpolitik, in: Monatsbericht März 2016, Vol. 68, No. 3, 2016, pp. 87-97; and P. König, K. Bernoth: The Eurosystem's Agreement on Net Financial Assets (ANFA): Covert Monetary Financing or Legitimate Portfolio Management?, in: DIW Economic Bulletin, No. 12+13, 2016, pp. 141-150.

2 European Central Bank: Agreement of 19 November 2014 on net financial assets, available at http://www.ecb.europa.eu/ecb/legal/pdf/en_anfa_agreement_19nov2014_f_sign.pdf. Prior to its publication on 5 February 2016, only a few senior individuals in the ESCB system seemed to have had access to the protocol. The authors approached the Bundesbank on 4 January 2016 with the request to consult this ECB document in accordance with the Freedom of Information Act. On expiry of the statutory response deadline on 3 February, the ECB published the wording of the protocol on 5 February following a unanimous decision taken on 3 February.

Arne Hansen, Helmut Schmidt University, University of the Federal Armed Forces Hamburg, Germany.

Dirk Meyer, Helmut Schmidt University, University of the Federal Armed Forces Hamburg, Germany.

own behalf. The ECB justifies ANFA by citing the principle of subsidiarity, according to which the national central banks may continue to independently carry out all transactions that fulfil national tasks but are unrelated to single monetary policy. Any further limitation of investment transactions conducted by national central banks would have to be laid down by national legislation.

The Eurosystem's balance sheet total is, however, subject to the control of the ECB Governing Council, which is vested with the power to establish the ANFA ceiling. This maximum amount is derived as the residual of control parameters such as cash in circulation, the scope of monetary policy outright transactions and other parameters. In accordance with its statute, the ECB Governing Council also has the power to verify that no monetary financing of governments is provided. To this end, the national central banks are required to provide the ECB Governing Council with information on their investment portfolios. In the case of violation of the objectives and tasks of the European System of Central Banks (ESCB), the ECB Governing Council must intervene. In addition, guidelines on the domestic operations of national central banks were published in 2014 to ensure that individual transactions are carried out in accordance with the rules.³ However, ANFA transactions are carried out by national central banks on their own behalf. Hence, the ECB can only intervene *ex post*, making this verification power a pro forma supervisory function of questionable effectiveness in some cases.

The ANFA ceiling, which is re-established each year, is distributed among the individual national central banks in accordance with the principle of ECB capital share.⁴ However, deviations and waiver clauses appear to be common practice. There are three types of waiver clauses (as per Article 3 of the ANFA):

- *Asset-specific waivers* protect holdings of certain assets which cannot be freely disposed of due to contractual restrictions or other constraints (for example, the gold reserves held by a central bank).
- Annex III of the ANFA provides information on *historical waivers*. Historical waivers ensure that, independently

of the member state's ECB capital share, there is no requirement to reduce NFA below a level "which is linked to their historical starting position".⁵

- *Dynamic waivers* permit the adjustment of the historical waivers of small NCBs over time in proportion to the growth or decline of the maximum financial assets of the Eurosystem.

In each case, the waiver which grants the national central bank concerned the maximum amount of NFA will become effective. Historical waivers alone can explain structurally significant deviations in the scale of ANFA own-account business operations (as a proportion of the member state's ECB capital share). Annex III of the ANFA provides for the allocation of a fixed amount of NFA, which can be used for equity investments, to each euro member state. The total amount for all 19 euro member states is €397.5 billion (see Table 1). The waiver shares granted to the smaller member states in particular are many times higher than their respective national ECB capital keys: for example, Malta with 691%, Cyprus with 485% and Luxembourg with 402%. Of the crisis countries, only Portugal (143%) and Greece (190%) are assisted. This rule takes disproportionately little account of the Netherlands (81%), France (79%), Ireland (71%) and Germany (71%).

Should the Eurosystem's NFA exceed the total of waivers granted (€397.5 billion), as has occurred continuously since 2008, these structural divergences may be brought into perspective but may also be exacerbated by member states continuing to make use of this system. This is especially true since Article 5 of the ANFA permits central banks to temporarily exceed the respective national ceiling. The examples provided included Emergency Liquidity Assistance (ELA) and the requirements of the International Monetary Fund (IMF). Notwithstanding the waivers, if a national central bank does not make full use of its individual ceiling or has planned a lower amount at the beginning of the year, the ANFA amounts that remain unused will be made available to the other national central banks.⁶ This rule provides the basis for further divergences.

3 See European Central Bank: Guideline of the European Central Bank of 20 February 2014 on domestic asset and liability management operations by the national central banks (ECB/2014/9), in: Official Journal of the European Union, 28 May 2015, available at https://www.ecb.europa.eu/ecb/legal/pdf/oj_jol_2014_159_r_0010_en_txt.pdf.

4 See Point 3 of the Preamble and Article 5 of European Central Bank: What is ANFA?, 5 February 2016, available at http://www.ecb.europa.eu/explainers/tell-me-more/html/anfa_qa.en.html. This denotes the relative ECB capital share, with the capital from the Eurosystem states providing the frame of reference.

5 Ibid. See also Article 3.2 of the ANFA, European Central Bank: Agreement of . . . , op. cit. Due to their diverse histories, the individual national central banks had different starting positions, which, at the time the euro was introduced, meant very different balance sheet structures in terms of absolute and relative values. As an alternative, it would have been possible to adjust and adapt the balance sheets through balance sheet contraction or the sale of assets such as gold and foreign currencies, accompanied by appropriate transfers to national budgets, thus dispensing with the need for a historical waiver.

6 See also Point 3 of the Preamble of European Central Bank: What is . . . , op. cit.; as well as Article 2.2 and Article 4 of the ANFA, European Central Bank: Agreement of . . . , op. cit.

Table 1
ECB capital share and ANFA historical waivers

Euro member states	ECB capital key (%)	Relative ¹ ECB capital key (%)	Historical waiver (billion euro)	Historical waiver (%)	Difference between capital key and historical waiver (percentage points)	Difference in % ²
Belgium	2.48	3.52	15.42	3.88	0.36	10.19
Germany	18.0	25.57	71.79	18.06	-7.50	-29.35
Estonia	0.19	0.27	1.31	0.33	0.06	20.43
Ireland	1.16	1.65	4.63	1.16	-0.49	-29.43
Greece	2.03	2.89	21.82	5.49	2.60	90.08
Spain	8.84	12.56	50.23	12.64	0.08	0.62
France	14.18	20.14	62.99	15.85	-4.30	-21.32
Italy	12.31	17.49	69.93	17.59	0.10	0.60
Cyprus	0.15	0.21	4.14	1.04	0.83	384.84
Latvia	0.28	0.40	3.69	0.93	0.53	131.47
Lithuania	0.41	0.59	5.86	1.47	0.89	151.00
Luxembourg	0.20	0.29	4.61	1.16	0.87	302.19
Malta	0.06	0.09	2.53	0.64	0.54	591.47
Netherlands	4.00	5.69	18.41	4.63	-1.06	-18.56
Austria	1.96	2.79	15.33	3.86	1.07	38.29
Portugal	1.74	2.48	14.07	3.54	1.06	42.92
Slovenia	0.35	0.49	4.86	1.22	0.73	149.12
Slovakia	0.77	1.10	16.95	4.27	3.17	288.69
Finland	1.26	1.78	8.90	2.24	0.45	25.46
Total	70.39	100	397.46	100	0	

¹ Capital key of the states signatory to the ANFA (members of the Euro-system). ² Difference expressed as percentage of the relative capital key of the ECB.

Sources: ANFA Agreement (Annex III); European Central Bank: Capital subscription, available at <https://www.ecb.europa.eu/ecb/orga/capital/html/index.de.html>; own calculations.

ANFA in practice⁷

What share of the total liquidity in the euro area is contributed by the national central banks? The *ANFA liquidity share* of the overall liquidity is cited in the literature as

7 See D. Meyer: Euro-Geldschöpfung durch die Mitgliedstaaten - Gefahren aus nationalem Zusatzgeld, in: ifo-Schnelldienst, Vol. 69, No. 6, 2016, pp. 30-40; and D. Meyer: ANFA - Nationale Geldschöpfung als Sprengsatz für die Währungsunion?, in: Wirtschaftsdienst, Vol. 96, No. 6, 2016, pp. 413-421. Using data from 2014, Meyer offers an analysis that differentiates according to motives of national money creation. For instance, the ELA and Target activities of the national central banks are separately examined here.

a possible indicator of the relevance of ANFA activities.⁸ Specifically, the Eurosystem's NFA are brought into relation with the liquidity need consisting of banknote circulation and minimum reserve requirements. In 2005 and 2006, the national central banks thus contributed 44% of the total liquidity. A significant part of money supply is based on national money creation by the national central banks. The countries concerned can collect the resulting seigniorage and, where appropriate, transfer this to their national budgets.

Liquidity shares, at best, serve as an indicator for the scope of a country's money creation activities within the monetary union. However, they do not allow for a more detailed assessment. Due to the lack of information on the type of investments, no conclusions regarding specific risks can be drawn. In addition to the growth rates of the overall liquidity need and the ANFA measures, the ECB Governing Council's internal targets regarding the desired liquidity deficit/surplus must be known in order to assess the leeway to conduct monetary policy.

Scope of the Eurosystem's gross and net financial assets

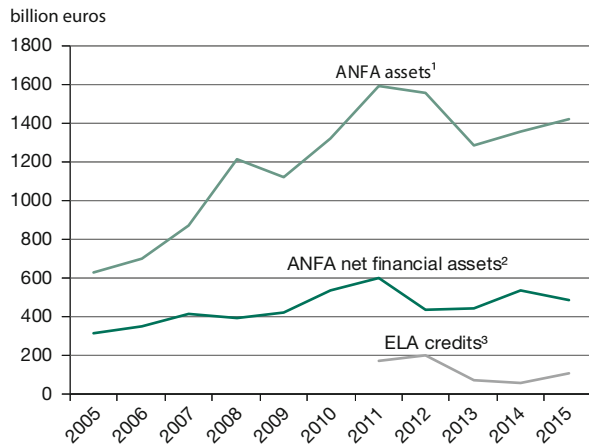
In the ANFA debate, gross and net financial assets should be distinguished. The net financial assets are calculated by subtracting the non-monetary policy-related liabilities from the non-monetary policy-related assets (the gross financial assets) of a central bank. The ECB uses net financial assets in its arguments.⁹ It argues that total liquidity is measured by offsetting all non-monetary policy assets against all non-monetary policy liabilities which are provided by central banks through their non-monetary policy operations.¹⁰ A crucial point of the argument is the need to observe a prescribed *liquidity deficit (or surplus)* limit to

8 See P. König, K. Bernoth, op. cit.; and F. Ritters: Warum eigentlich ... sind die nationalen Notenbanken in der Euro-Zone mächtiger, als man denkt?, in: Wirtschaftswoche, No. 14/2016, 2016, p. 32. The data here has been calculated on the basis of the Eurosystem's consolidated balance sheets.

9 In European Central Bank: What is..., op. cit., NFA are calculated in accordance with the definition used by the ECB based on the structure of the Eurosystem's consolidated balance sheet - the sum of balance sheet items A1 to 4, 5.6, 6, 7.2, 8 and 9 on the assets side minus balance sheet items P2.5 and 3 to 12 on the liabilities side. See also Annex I of the ANFA, European Central Bank: Agreement of..., op. cit.; and D. Hoffmann: ANFA ermöglicht Finanzierung von Bankenabwicklungen durch nationale Zentralbanken, in: ifo-Schnelldienst, Vol. 69, No. 13, 2016, pp. 19-27, in particular, Annex I, in which the appropriate balance sheet items of the national central banks are shown.

10 See explanation in European Central Bank: What is..., op. cit. This connection becomes particularly apparent when considering the revaluation reserve which is the counterpart item to the revaluation of currency reserves on the assets side of the balance sheet.

Figure 1
National additional money created by euro area national central banks, 2005-15



¹ ANFA assets: Items 1-4, 5.6, 6, 7 (until 2007), 7.2 (from 2008), 8 and 9 of the consolidated balance sheet of the Eurosystem. ² ANFA net financial assets: Items 1-4, 5.6, 6, 7 (until 2007), 7.2 (from 2008), 8 and 9 (ANFA assets) minus items 2.5 and 3-12 (ANFA liabilities) of the consolidated balance sheet of the Eurosystem. ³ ELA credits: ANFA assets, Item 6.

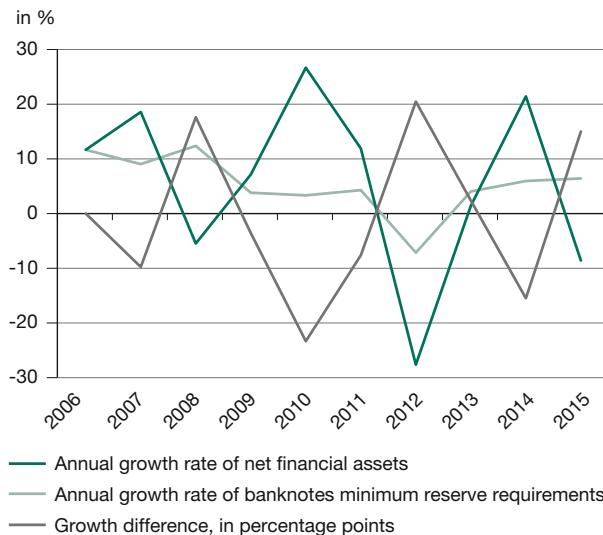
Source: ECB annual reports (the latest figures in each case); own calculations.

be able to conduct effective monetary policy.¹¹ The resulting liquidity deficit is the difference between banknote circulation together with the minimum reserve requirements (liquidity need) and regular monetary policy measures plus NFA (liquidity supply). Leeway to conduct monetary policy is calculated by deducting the growth rate of NFA from the growth rate of the needed liquidity. To maintain the same amount of leeway with regular monetary policy instruments, ANFA net asset holdings should increase by no more than the increase in demand for banknotes and in minimum reserve requirements (liquidity need). This is the only way in which the target value of the desired liquidity deficit can be achieved without any difficulties.

Using the *net concept*, the value of NFA increased from €314.8 billion in 2005 prior to the start of the financial crisis to €599.8 billion by the end of 2011 before falling

11 "A liquidity shortage vis-à-vis the Eurosystem, also referred to as a 'liquidity deficit', was the basis of monetary policy implementation. ANFA protected this liquidity deficit." European Central Bank: What is... , op. cit. The liquidity deficit permits central banks to exercise short-term control of the interest rates, since the commercial banks are forced to obtain funding from the national central bank. See also Deutsche Bundesbank, op. cit., p. 91.

Figure 2
Monetary policy leeway: Development of banknotes and minimum reserve requirements vs. NFA, 2006-15



Note: Growth rate of banknotes plus minimum reserve requirements (needed liquidity) minus the growth rate of the NFA is an indicator of the leeway to conduct monetary policy.

Source: European Central Bank: What is ANFA?, 5 February 2016, available at http://www.ecb.europa.eu/explainers/tell-me-more/html/anfa_qa.de.html; own calculations.

slightly to €489.7 billion by 2015 (see Figure 1),¹² According to the ECB, it complied with its own rules: Since the introduction of euro bank notes in 2002, NFA increased by an average of five per cent per year until 2015, while the needed liquidity grew by an average of seven per cent per year. The ECB regards this as indicative of an average annual increase in leeway to conduct monetary policy.

When the annual rates between 2006 and 2015 are analysed, a differentiated picture emerges (see Figure 2). First of all, the considerable fluctuation becomes apparent. The growth difference indicator ranges from 20.5 percentage points in 2012 to -23.2 percentage points in 2010. Assuming a liquidity deficit that is linked to and constant in relation to the needed liquidity, greater leeway to conduct monetary policy only actually arose in four of the ten years considered, whereas in five of the ten years it decreased. However, due to a lack of transparency, it is not possible to determine whether, or to what extent, the liquidity defi-

12 See European Central Bank: Consolidated Balance Sheet of the Eurosystem as at 31 December 2015, 2016, available at <https://www.ecb.europa.eu/pub/pdf/other/eurosystembalancesheet2015.en.pdf>. For further annual data, please also see the appropriate Eurosystem annual financial statements.

cit envisaged by the ECB was changed.¹³ Thus, *ceteris paribus*, the average annual increase in leeway to conduct monetary policy over the period considered here was considerably smaller than that stated by the ECB. Unfortunately, the unambiguous interpretation and evaluation of the data is not possible in this case either. On the one hand, an unstable liquidity deficit target may have caused this high level of fluctuation, and on the other, the scope of regular monetary policy may have been subject to fluctuation. Moreover, in the presence of a relatively constant target, planned or unplanned money creation on the part of national central banks may have brought about this fluctuation in the leeway to conduct monetary policy. The latter would be particularly problematic.

After all, the fact that the indicator was negative during the crisis years as a result of the intended liquidity surplus is quite understandable. Due to the lack of transparency, no verifiable information can be provided on this either.

On the other hand, the *gross concept* sheds light on the national central banks' actual autonomous securities acquisition activities at the national level and on the distinct liquidity supply generated in this connection.¹⁴ Since the generation of liquidity generally involves interest income, the amount of activities also provides an indication of the level of internalised seigniorage at the national level. In addition, this approach makes it possible to expound on the type of securities purchased, such as the volume of purchased government bonds. According to the gross concept, the value of the securities held by the euro area national central banks (ANFA assets) in their own portfolios increased from €632.6 billion in 2005 to €1595.9 billion in 2011 (see Figure 1).

To assess the significance of liquidity autonomously generated, NFA should be considered in relation to the Eurosystem's balance sheet total (see Table 2). Between 2005 and 2015, this share came to between 14.7% and 30.6%. Over the same time period, the share of the balance sheet total covered by liquidity (gross ANFA assets) autonomously generated at the national level fluctuated between 51% and 66%. However, the figures only reflect the Eurosystem crisis to a limited extent, since the balance sheet total was increased or adjusted according to the liquidity requirements.

13 For example, the target of achieving a lower liquidity deficit/higher liquidity surplus could justify higher growth of NFA compared to that of banknotes and minimum reserve requirements without limiting the leeway to conduct monetary policy with regular instruments. This is one example of how the ECB's lack of transparency can cause a credibility issue.

14 The gross concept includes the ANFA assets – items A1 to 4, 5.6, 6, 7 (up to 2007), 7.2 (from 2008), 8 and 9 – of the Eurosystem consolidated balance sheet.

Table 2
Gross and net financial assets' share of the Eurosystem's balance sheet total, 2005-15

Year	Net concept: NFA share of the balance sheet total, in %	Gross concept: ANFA asset share of the balance sheet total, in %
2005	30.31	60.91
2006	30.59	60.82
2007	27.67	57.74
2008	19.03	58.54
2009	22.25	59.08
2010	26.78	65.96
2011	21.94	58.39
2012	14.66	52.64
2013	19.40	56.53
2014	24.25	61.62
2015	17.61	51.02

Source: Consolidated Eurosystem balance sheet; own calculations.

Major differences between the net financial assets held by the individual national central banks

As mentioned above, the ANFA ceiling is to be distributed among the national central banks according to their ECB capital share.¹⁵ Things are different in practice, however. In 2015 the Bundesbank held securities worth €12.4 billion in its non-monetary policy portfolio, which constituted just 1.2% of its balance sheet total.¹⁶ In contrast, the Banca d'Italia's corresponding 2015 figures were €86.2 billion and 14.7%. The Banque de France had as much as €91.9 billion (12.9%) in the corresponding balance sheet items without specifying the nature of the investments. Greece, Spain, Portugal and Ireland also had high levels of equity investments (see Table 3). In the period 2010-12, the ratio of sovereign debt papers held by the Italian, Greek, Portuguese, Spanish and Dutch national central banks to their balance sheet totals ranged between 70% and 97%.¹⁷

15 See Point 3 of the Preamble, European Central Bank: What is... , op. cit.; and Article 2, European Central Bank: Agreement of... , op. cit.

16 See Deutsche Bundesbank: Geschäftsbericht 2015, Frankfurt/Main 2016, Deutsche Bank. Unless otherwise indicated, the following data reflects the figures pertaining to 31 December 2015, the authors' own calculation being based on balance sheet items A7.2 and A11.3, and the explanatory documents as published in the national central banks' respective annual financial statements.

17 See D. Hoffmann: Die EZB in der Krise, Dissertation, Berlin 2015, pp. 190 ff. See also P. König, K. Bernoth, op. cit., p. 149.

Table 3
ANFA data from selected national central banks, as of 31 December 2015

National central banks	ECB capital key (%)	Relative ¹ ECB capital key (%)	Total items 7.2 + 11.3 (billion euros)	Share of items 7.2 + 11.3 of the balance sheet total (%)	NFA (ANFA assets minus ANFA liabilities) (billion euros)	NFA share of the balance sheet total (%)	Share of the Eurosystem's total NFA (%)	Absolute difference ² (percentage points)	Difference (%) ³
Banque de France	14.18	20.14	91.90	12.94	109.74	15.45	22.41	2.27	11.26
Banca d'Italia	12.31	17.49	86.17	14.66	134.93	22.95	27.55	10.06	57.55
Bank of Greece	2.03	2.89	19.15	11.71	84.81	51.87	17.32	14.43	499.58
Banco de España	8.84	12.56	51.74	11.63	78.64	17.68	16.06	3.50	27.86
Banco de Portugal	1.74	2.48	18.18	15.55	16.15	13.81	3.30	0.82	33.13
Central Bank of Ireland	1.16	1.65	48.53	62.83	23.89	30.93	4.88	3.23	195.89
Deutsche Bundesbank	18.00	25.57	12.38	1.22	-53.56	-5.29	-10.94	-36.50	-142.78

¹ Capital key of the states signatory to the ANFA (members of the Eurosystem). ² Difference between the national central bank's share of the Eurosystem's total NFA (%) and the relative capital key (%). ³ Difference expressed as percentage of the relative capital key of the ECB.

Sources: ECB; annual reports of the respective NCBs and of the ECB (consolidated); own calculations.

As shown in Table 3, the highest NFA values in 2015 were held by the Italian (€134.9 billion), French (€109.7 billion), Greek (€84.8 billion) and Spanish (€78.6 billion) national banks.¹⁸ The table also displays the NFA as a percentage of the balance sheet total of a national central bank, i.e. the share of (net) liquidity autonomously generated at the national level. Moreover, the ratio of a national central bank's share of the Eurosystem's total NFA to its ECB capital share is an indicator of the scale of unbalanced ANFA own-account business operations. In 2015 Greece (600%)¹⁹ and Ireland (296%)²⁰ had the highest ratios.²¹ In contrast, Germany's ANFA operations were distinctly disproportionate in scale (-43%).

Assessment

From a legal viewpoint, ANFA operations are incontestable provided that the Governing Council of the ECB has given its approval and that they do not contravene Article 123 of the Treaty on the Functioning of the European Union (TFEU). The independence of central banks necessitates transparent business dealings. ANFA additional money, however, is characterised by *intransparency*.²² Not only was the ANFA protocol hidden from the public for

many years, but the national central banks were also not required to provide detailed accounts of these operations. Hence, only limited information on the actual volume of security purchases can be found in the annual reports.²³ Moreover, there are no details on the maximum amounts for the countries concerned nor of the investments realised and their offsetting positions. Information on the national ceilings for ELA emergency credits is limited to the scope of the operation and does not include the conditions or the collateral submitted.²⁴

Differences in monetary policy assessment may also affect securities accounting. In particular, the consequences of the classification of securities purchases in the scope of the Outright Monetary Transactions Programme are of interest. Since the ECB justifies potential purchases with a disruption of the monetary policy transmission mechanism, it would logically include these secu-

18 See also the development of national NFA over time from 2001 to 2014 in P. König, K. Bernoth, op. cit., p. 145.

19 The provision of ELA funds is probably largely responsible for this.

20 This excessively high volume of own-account business operations may have resulted from a €25 billion government debenture which the Central Bank of Ireland exchanged for government debt instruments of a lower present value.

21 See also results averaged over the period 2002-14 in P. König, K. Bernoth, op. cit., p. 144.

22 See also D. Hoffmann: ANFA ermöglicht..., op. cit.

23 The ECB has announced its intention to publish the annual average value of NFA held by it and the Eurosystem national central banks. See European Central Bank: ECB publishes Eurosystem disaggregated balance sheet data, Press release, 27 July 2016, available at <https://www.ecb.europa.eu/press/pr/date/2016/html/pr160727.en.html>. For the 2015 data published, please see European Central Bank: Guideline of... op. cit. In addition, the national central banks intend to disclose their data pertaining to NFA; see European Central Bank: ECB explains the Agreement on Net Financial Assets (ANFA), Press release, 5 February 2016, available at <http://www.ecb.europa.eu/press/pr/date/2016/html/pr160205.en.html>; and, as a particularly positive case, Central Bank of Ireland: Annual Report 2015, Dublin 2016, p. 54. Even in the past, the Deutsche Bundesbank was one of the positive exceptions, and it currently provides a detailed account of its autonomously held NFA at the national level; see Deutsche Bundesbank, op. cit., p. 94.

24 Appropriate data can be found in item A6 of most annual financial statements.

rities in the balance sheet under item A7.1 (Securities held for monetary policy purposes). Where the purchases are deemed fiscal in nature due to the intention of lowering the respective country's risk premium and avoiding insolvency, i.e. an intervention that is not motivated by monetary policy, their inclusion in the balance sheet under A7.2 (other securities) would be appropriate. This example points to possible leeway regarding the balance sheet inclusion under ANFA or non-ANFA items. Quantitative easing, which commenced in March 2015, and the resulting purchase programme generally caused the risk premia of the Mediterranean member countries to decrease significantly, thus making their sovereign debt easier to finance. This is another situation where there is ambivalence regarding the assessment and balance sheet inclusion possibilities, with the ECB itself considering A7.1 as the appropriate balance sheet item.²⁵

Seigniorage and monetary financing of governments

Every national central bank can derive special benefits from the seigniorage earned on equity investments. The resulting profits are not part of the monetary income which has to be distributed among the Eurosystem's national central banks, instead, the national central banks transfer a corresponding share of the profits to the respective national governments.

Particularly in the case of ANFA securities purchases that include government debt instruments, there seems to be monetary financing of governments. These purchases tend to lead to a decrease in interest rates. Hence, there is only a limited degree of market control with regard to government loans. Since the central bank pays the interest income directly to the national budget, the treasury acquires funding at an interest rate of virtually zero. This leads to false incentives regarding budget consolidation. In the case of a national bankruptcy, all ESCB system members would be proportionally liable.

To serve the national interest, monetary policy is increasingly being combined with fiscal policy without the intervention of the ECB. Hence, the ELA loans provided to Greece functioned as monetary interim financing, even though the regulations covering the prohibition of monetary government financing as laid down in Article 123, TFEU were formally observed.²⁶ State insolvency and withdrawal from the eurozone could thus be averted for

the moment. This only opened the door to further fiscal rescue measures. In Greece (2014-15) and Cyprus (2013), preventing the collapse of the national banking system had priority. Since this involved isolated risks (a sizeable proportion of the loans in question were held as part of government budgets or by the ESCB), there was hardly any risk to the Eurosystem's financial stability. Since the lack of capital at certain commercial banks was known early on, the national central banks in these countries, with the support of the ECB, knowingly kept banks with excessive levels of debt alive. Thus, the ELA loans ultimately funded capital flight and cash withdrawals by private persons.

Consequences for countries in crisis, risks for the EMU

What consequences does national additional money have for countries in crisis and the EMU in particular? Generally, lower interest rates lead to increases in demand for credit. The possible intention behind the use of additional money in the countries in crisis is to boost domestic demand in the short run. However, if wage and price increases should ensue and structural reforms are not undertaken, the countries could become even less competitive. As far as the treasury is concerned, the purchase of own government bonds by the national central bank under ANFA leads to financing at an interest rate of virtually zero, since the interest income again accrues to the national budget. Hence, if interest rates should rise in the future, the incentive to make use of the ANFA licence to print national money could become even more relevant. Submitting government bonds as collateral for ELA loans promotes the sale of new government debt instruments which otherwise nobody would have purchased. The purchase of ANFA securities provides countries in crisis with resources, which (a) substitute domestic saving, (b) enable a government budget deficit and (c) finance net domestic investments.²⁷ The citizens of a country in crisis benefit from this, since they are required to shoulder less of a burden than the market conditions would have demanded.

With the creation of national additional money, seigniorage income accrues to the national central bank. National money and thereby credit creation is equivalent to the virtually joint and several liability of member states for eurobonds, since in the case of state insolvency, the euro area states will be liable in proportion to their capital key.

²⁵ Compared to 2014, item A7.1 of the 2015 consolidated balance sheet increased by €586 billion to a total of €2781 billion.

²⁶ See the discussion on the ECB as the lender of last resort for governments in A. Winkler: The ECB as Lender of Last Resort: Banks versus Governments, in: *Jahrbücher für Nationalökonomie und Statistik*, Vol. 235, No. 3, 2015, pp. 329-338; and D. Meyer, op. cit., 2015.

²⁷ According to the economic expenditure approach, the savings of private households and enterprises finance the economic net investments, a government budget deficit and an export surplus.

In the extreme event of the dissolution of the eurozone, the ECB or ESCB will cease to be the counterparty.²⁸

Thus, national additional money can lead to free-rider behaviour. It exonerates states from the costs and sanctions associated with high levels of government debt and a profligate economic policy. In the context of the externalisation of costs for the irregular bailout of banks and countries, the currency union could be abused to further specific national interests.²⁹ As possible side effects, crises could be perpetuated or even intensified.

Conclusions

Purchases of ANFA securities are equity investments by national central banks on their own behalf. Their considerable share of the Eurosystem's balance sheet total – 51% (gross) and 18% (net), as well as 41% of its total liquidity – jeopardises the principle of congruence regarding the issuing and reception community in a currency union. These investments allow the national central banks to issue national additional money which is used for the (interim) monetary financing of crisis states and the support of insolvent banks, among other things. Moreover, they reduce the incentives for adjustment measures. The liability in case of an insolvency of the crisis state, however, falls proportionately to the euro member states. In addition, own account business operations are largely intransparent. In the past, the Governing Council of the ECB failed to exercise its control function several times. There is a danger that national additional money creation based on the ANFA could act as an explosive device for the EMU. A clear containment of own account business operations is therefore required in order to reinstate currency emission at the community level.

²⁸ Negotiations on euro rescue funds or even withdrawal negotiations initiated by member states increase the crisis states' potential for blackmailing other member states. See also S. Kooths, B. van Roye: Nationale Geldschöpfung zersetzt den Euroraum, in: Wirtschaftsdienst, Vol. 92, No. 8, 2012, p. 524.

²⁹ See discussion in A. Winkler, op. cit.; and D. Meyer: Comment on Adalbert Winkler, The ECB as Lender of Last Resort: Banks versus Governments, in: Jahrbücher für Nationalökonomie und Statistik, Vol. 235, No. 3, 2015, pp. 345-347.