THE CURRENCY BOARD IN BULGARIA – STAU QUO AND PERSPECTIVES

Emil Kalchev
New Bulgarian University, Sofia, "Montevideo" №21, Bulgaria

Abstract

The currency board was introduced in Bulgaria in 1997 in order to limit the galloping inflation and to stabilise the economy. It operates successfully as it "survived" the global financial crisis in 2008 and the bank runs in Bulgaria in 2014. Worst case simulations showed unambiguously resistance of the currency board to internal and external shocks in the mid-term outlook. Reflecting the panic and the bank runs in the summer 2014, indicators for the board’s status reported deterioration. However, they stabilised immediately thereafter, not giving any cause for concern about the stability of the board at the end of the year.

Keywords: monetary sector, currency board, currency board agreement

1. THEORETICAL AND INSTITUTIONAL BACKGROUND

The currency board regime was introduced in Bulgaria in 1997 in order to limit the galloping inflation and to stabilise the economy. The local currency (Bulgarian lev, BGN) was pegged to the Deutsche mark and then to the euro at the fixed exchange rate of BGN 1.95583 = EUR 1. In turn, the scope of the monetary policy of the Bulgarian National Bank (BNB) was restricted: it cannot conduct open market operations anymore; indeed, the BNB can act as a "lender of last resort", but only in case of systemic risk, to solvent banks, up to a certain limit and against a collateral; however, the BNB continues to set the minimum reserve requirements for commercial banks. The currency board also implemented a more strict fiscal discipline, since it prohibited the central bank to lend to the government. Prerequisite for the functioning of the currency board regime (CBA) is the coverage with FX reserves of the money in circulation (issued by the BNB), the bank reserves in the BNB (=monetary base, MB), as well as the deposits of the government and the BNB’s Banking department in the BNB. The currency board operates successfully as it "survived" the global financial crisis in 2008 and the bank runs in Bulgaria in 2014. All political parties and governments have been officially supporting the CBA since its introduction. Moreover, they agree to preserve it until Bulgaria enters the euro area. According to the Minister of Finance, Mr. Goranov, the government is about to ask the countries in the euro area for a "roadmap" describing the reforms needed for entering the euro area’s "waiting room" (ERM 2), which is believed to be realistically attainable by 2018.

2. SOLID COVERAGE WITH FX RESERVES

The coverage of the monetary base with FX reserves is the main indicator for the condition of the currency board and the required minimum for ensuring its stability is a 100% coverage.1

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1 In practice, this minimum is extended with additional buffer of 10-15%.
As of December 2014, the FX reserves amounted to EUR 16.5 bn, which corresponded to a 165.1% coverage of the monetary base - a value far beyond the statutory minimum. Based on this indicator the following worst-case-scenarios can be simulated:

(1) If the government deposit in the BNB (EUR 3.4 bn) was excluded from the FX reserves, as of December, the coverage of the monetary base would have declined to 130.8%, which significantly exceeds the required minimum (including buffer). In other words even if the government liquidated its deposits (a key element of the fiscal reserve), due to a catastrophic fiscal situation for instance, such an extreme action would not undermine the functioning of the currency board. Moreover, 30.8% of the FX reserves could be used for refinancing commercial banks if necessary, given the rules of the currency board. On the other hand, the dynamics of budget deficits, fiscal reserves (held in deposits) and public debt indicate that by 2014 new debt was issued to cover deficits. Therefore, the FX reserves have not been effectively reduced on the back of the fiscal reserve. According to the debt issuance program until 2017, the policy of increasing the public debt is continued, which means that on the fiscal side no threats to the currency board are envisaged in the mid-term. Problems, however, could arise if the accelerated indebtedness continues in a long run and on a broad scale.

Source: BNB
(2) If all BGN in circulation and on bank deposits (BGN-denominated part of M2) were converted into the reserve currency as of December, this would have been likely for 73.2% of them. This significant portion, almost ¾ of the BGN supply, is marking the stability boundary of the board in case of total bank run and severe currency crisis. Ultimately, the probability of all BGNs to be converted into the reserve currency at a given moment is rather limited. A total conversion of BGN into EUR and mass withdrawal of deposits would put banks into liquidity and exchange difficulties. In effect, they would appear as “natural protectors” of the currency board. The fact that ¾ of the Bulgarian banks are foreign-owned, mainly by parent companies in the euro area, provides an additional buffer of confidence that the board and the exchange rate can be preserved. Nevertheless, in such a drastic situation the presence of a strong political will and adequate countermeasures by the authorities seem to be essential.
(3) The balance of payments directly influences the volume of the FX reserves. Sustainable trend of negative balances or a shock capital outflow on the side of the financial account would erode the FX reserves, which are the foundation of the currency board. For the past five years cumulatively, the total balance of the current, capital and financial account was positive. The same also applies to the three accounts separately. The program for issuing up to EUR 8 bn external debt until 2017, the expected positive net transfers (from EU and Bulgarians living abroad) and net foreign investment (direct and portfolio) give confidence that in the mid-term no negative external shocks on the currency board are envisaged.

![Balance of payments (EUR bn)](image)

Source: BNB

(4) Against the backdrop of a stable price level in the euro area, a shock rise in the local prices, or a strong and lasting inflationary tendency, could cause a mass exodus from BGN to EUR. Such a development would exert a strong pressure for reviewing the fixed exchange rate. Due to the more rapid growth of the GDP in Bulgaria and the price conversion with the EU the consumer price index showed a moderately higher inflation till 2009. On the contrary, the local cumulative inflation for the period 2010-2014 was by 1.0pp lower than in the euro area and the trend is expected also to remain below in the mid-term. Therefore, no significant price disparity exists and no pressure on the fixed exchange rate or the CBA stability is expected.
3. CONFIDENCE IN THE CURRENCY BOARD

Money outside banks is the most liquid monetary aggregate. The greater the ratio of the money outside banks to deposits, the more likely that a large amount of BGN could be converted rapidly into the reserve currency. Hikes in this ratio point out behavioural dynamics driven by panic, while its stable increase shows a process of sustainable erosion of the confidence in national banks and currency. As of December, this indicator amounted to 17.6%, registering 0.2pp month-on-month and 2.0pp year-on-year increase. Although it is higher than a year before, this rate indicates a high stability of the board as of 2014, because it is lower than the monthly rates during the crisis 2008/2009, when the board showed no sign of weakness.

Source: BNB
Additionally, the variation of the demand on cash did not undergo sudden or unusual changes in December, or during the year, with exception of June when the bank run went off. According to our model, the values of the demand are not typical, when they differ by more than two 12-month moving standard deviations from the previous value. On the whole, in 2014 the indicator remained in the corridor defined by the two standard deviations (taken with the signs "plus" and "minus"), which confirms the stability of the cash demand.

**Variation in the demand for notes and coins (EUR bn)**

![Variation in the demand for notes and coins](image)

*Source: BNB*

Also regarding the currency structure of the deposits a particular sudden change was observed neither in December, nor in 2014. At the end of the year foreign currency deposits were 37.0% of the total deposits, which is by 0.3pp less than in November and by 0.9pp less compared to end-2013. On the contrary to this development, a sharp conversion to currency deposits would be an indicator of an escape from BGN.

**Share of EUR-denominated deposits (%)**

![Share of EUR-denominated deposits](image)

*Source: BNB*
4. THE BANK RUN DID NOT AFFECT THE BOARD

In June 2014, a run on the fourth largest Corporate Commercial Bank (KTB) caused a massive withdrawal of deposits. After a week, queues appeared also in front of the third largest First Investment Bank (FIB). KTB was placed under special supervision by the BNB and practically liquidated in November/December, whereas FIB received financial support by the government and was saved. The deposits in the bank sector reacted to this with an insignificant decline in June (compared to May), and then continued growing. The write-off of KTB’s deposits affected, however, the volume of the deposits in the sector in November, but the decline was offset already in December. In turn, loans underwent a slight decline in July and August, a significant drop in November and a hardly noticeable contraction in December. In June, net foreign bank assets fell sharply, yet recovered and grew thereafter. All-in-all the banking sector was not affected by the crisis. It remained stable and even kept its development trends. However, the sector absorbed the reserve of the Deposit Insurance Fund and a large credit resource of the government. In other words, overcoming another similar run would be much more difficult and with quite unpredictable outlook.

![Loans and deposits (EUR bn)](chart)

On the whole, the main indicators, based on the coverage of various monetary aggregates with FX reserves, reacted with a slight deterioration in June, and then they not only recovered but also improved. Otherwise, the behavioural indicators registered a sharp rise in the demand of cash and an increased demand on EUR.

In December, a sharp deterioration of the main indicators in connection with the liquidation of KTB was observed, while the behavioural indicators, as expected, did not react noticeably. Improvement of the main indicators is envisaged due to the “consumption” effects of the banking crisis.
Dynamics of the indicators for the state of the CBA (2014)

<table>
<thead>
<tr>
<th><strong>Main indicators</strong></th>
<th>31.05</th>
<th>30.06</th>
<th>31.07</th>
<th>31.11</th>
<th>31.12</th>
</tr>
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<tbody>
<tr>
<td>FX coverage of the monetary base (MB)</td>
<td>169.3%</td>
<td>164.5%</td>
<td>183.3%</td>
<td>186.8%</td>
<td>165.1%</td>
</tr>
<tr>
<td>FX coverage of MB and the government deposit</td>
<td>141.8%</td>
<td>140.1%</td>
<td>142.8%</td>
<td>146.0%</td>
<td>130.8%</td>
</tr>
<tr>
<td>FX coverage of the BGN-denominated part of M2</td>
<td>61.5%</td>
<td>64.8%</td>
<td>68.3%</td>
<td>75.1%</td>
<td>73.2%</td>
</tr>
</tbody>
</table>

| **Behavioral indicators** | | | | | |
|---------------------------|-------|-------|-------|-------|
| Money outside banks to deposits ratio | 15.0% | 16.0% | 16.1% | 17.4% | 17.6% |
| Variation in the demand for notes and coins (EUR mn)* | -469.0 | 95.1 | -406.0 | -322.9 | -74.8 |
| Share of EUR-denominated deposits | 36.1% | 36.8% | 37.4% | 37.0% | 35.5% |

* Difference between the change in value and the standard deviation

Source: BNB

The currency board survived successfully the banking run in the summer of 2014. Nevertheless, the outcome of further similar scenarios is unpredictable. The stability of the CBA highly depends on the efficiency of the banking supervisory mechanism in the country and the political will to preserve it, until the entry of Bulgaria in the euro area.

5. CONCLUSIONS

Currency board stability is guaranteed by the coverage of monetary aggregates with foreign exchange (FX) reserves. As of December 2014, the coverage of the main aggregate, the monetary base, reached 165.1%, which is far beyond the minimum of 100% coverage to guarantee sound functioning of the currency board arrangement (CBA).

Worst case simulations in the fiscal and external sectors as well as in connection with the price index dynamics showed unambiguously resistance of the currency board to internal and external shocks in the mid-term outlook.

Reflecting the panic and the bank runs in the summer 2014, CBA indicators for the board’s status reported a deterioration. However, they stabilised immediately thereafter, not giving any cause for concern about the stability of the board at the end of the year.

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