“Coordination of state fiscal and monetary policy the in the context of post-conflict recovery”

AUTHORS
Andrii Polchanov

ARTICLE INFO
Andrii Polchanov (2017). Coordination of state fiscal and monetary policy the in the context of post-conflict recovery. Accounting and Financial Control, 1(2), 19-28. doi:10.21511/afc.01(2).2017.03

DOI
http://dx.doi.org/10.21511/afc.01(2).2017.03

RELEASED ON
Tuesday, 11 July 2017

RECEIVED ON
Saturday, 10 June 2017

ACCEPTED ON
Thursday, 06 July 2017

LICENSE
This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License

JOURNAL
"Accounting and Financial Control"

ISSN PRINT
2543-5485

ISSN ONLINE
2544-1450

PUBLISHER
LLC “Consulting Publishing Company “Business Perspectives”

FOUNDER
Sp. z o.o. Kozmenko Science Publishing

NUMBER OF REFERENCES
20

NUMBER OF FIGURES
4

NUMBER OF TABLES
8

© The author(s) 2018. This publication is an open access article.
COORDINATION OF STATE FISCAL AND MONETARY POLICY IN THE CONTEXT OF POST-CONFLICT RECOVERY

Abstract

The article is devoted to the study of fiscal and monetary components of state’s financial policy and their coordination after the completion of hostilities. The urgency of the topic is determined by the need to find an optimal (in terms of economic system) strategy of interaction between the government and the central bank in the conditions of post-conflict recovery.

The purpose of the article is to summarize the world experience of formation of fiscal and monetary policy as well as their coordination in order to effectively overcome the consequences of military conflicts.

The author analyzes the data on the post-war development of 12 countries that succeeded in restoring their national economies during the first decade after the end of hostilities (Angola, Cambodia, the Republic of Congo, Croatia, Georgia, Indonesia, Liberia, Macedonia, Serbia, Sierra Leone, Solomon Islands, Tajikistan). As a result, the author discovers a gradual transition from the fixed and regulated exchange rate regime to the floating exchange rate in the long-term perspective, reduction of inflation and interest rates on loans, as well as a gradual increase of GDP and the net inflow of foreign direct investments, while the share of tax revenues and public expenditures in GDP remained stable.

On the basis of generalization of the world experience the conclusion was made about the key role of central banks in ensuring economic growth in the context of post-conflict recovery by ensuring price stability and stimulating lending. In addition, the importance of geographic location and availability of natural resources in the restoration of the national economy of some countries was emphasized.

Keywords

military conflict, economic development, coordination, monetary policy, post-conflict recovery, fiscal policy

JEL Classification

E52, E62, F51

INTRODUCTION

The post-conflict environment is characterized by significant uncertainty, which may be caused by the weakness of peace agreements, deepening divisions in society and total neglect of the interests of the defeated party, and, as a consequence, the recurrence of hostilities as it was in case in Afghanistan, Cambodia, Congo and other countries. In addition, the expectations of a rapid recovery in the affected country and by the international community may apply a peculiar pressure on government policies, forcing them to reduce the priority of projects focused on achieving results in the long-term perspective.

Therefore, it is very important, especially for domestic realities, to study the global experience of monetary and fiscal policies conducting and their coordination in the context of post-conflict recovery.
1. LITERATURE REVIEW

The issues related to the monetary policy of post-conflict countries have been reflected in many foreign publications including “Monetary Policy in Post-Conflict Countries: Restoring Credibility”, which revealed that reforms in the field of monetary policy are important for economic recovery through the lowering of the level of inflation, reduction of uncertainty and creation of conditions for attracting international assistance (Starr, 2004); “Monetary Policy Issues in the Post Conflict Economies” focusing on the key issues regarding the preparation for changes in the monetary policy of Afghanistan, Bosnia and Herzegovina, and Kosovo (Coats, 2007); “Post-conflict monetary reconstruction”, which focuses on the study of possibilities of using a seigniorage, its impact on inflation in the context of external financial support (Adam, Collier, Davies, 2008); “Exchange Rate Regimes for Post-Conflict Recovery” studying the effects of the post-conflict development exchange rate regime based on the analysis of data of 132 countries, including 38 countries that hardly suffered from conflicts over the period 1970-2008 (Elbadawi, Soto, 2013).

Regarding the fiscal policy of post-conflict countries, the following studies are of great interest in this area: “The fiscal dimensions of conflict and reconstruction”, which is devoted to the relationship of the fiscal policy with the beginning of conflicts and the importance of providing public goods as one of the incentives to increase tax revenues (Addison, Murshed, 2001); “Fiscal decentralization in post-conflict countries”, which is devoted to the issue of fiscal decentralization as one of the elements of ethnic conflict resolution and ways to increase the efficiency of redistribution of financial resources at the local and national levels (Fox, 2007); “Budgeting in Postconflict Countries”, which addresses the problems of income forecasting and efficient allocation of budget funds (Schiavo-Campo, 2007); “A Guide to Economic Growth in Post-Conflict Countries”, which seeks to achieve a compromise in the fiscal policy between short-term and long-term benefits, speed and legal regulation, efficiency and effectiveness (Dod, Smith, 2009).

Considering the high level of centralization of power in the Soviet period and subordination of the State Bank to the government of the USSR, the problems of coordination of fiscal and monetary policies did not represent a significant interest for a long time. The first works in this area include such publications as “Some unpleasant monetarist arithmetic” devoted to the interaction of the government and the central bank on the issues of public debt management and its impact on economic development, in particular, it studied the impact of the policy of the Ministry of Finance on the monetary policy of the Federal Reserve System and possible restrictions for the latter (Sargent, Wallace, 1981) and “Issues in the coordination of monetary and fiscal policy”, in which on the basis of the game theory the author came to the conclusion that coordination can only be effective if the positions are fully consistent (Blinder, 1982).

Undoubtedly, these studies were focused on the peculiar features of the US financial policy and require adjustments in order to be implemented in other countries. At the same time, they became the basis for further research, in particular in Russia (Pekarsky, Atamanchuk, Merzlyakov, 2007) and the Republic of Belarus (Bobko, 2008). However, the coordination of fiscal and monetary policy of Ukraine in the context of post-conflict recovery is still insufficiently investigated.

The purpose of the study is to summarize the global experience in formation of fiscal and monetary policy as well as their coordination in order to effectively overcome the consequences of military conflicts.

2. KEY RESEARCH FINDINGS

The goal of one of the above-mentioned studies (Elbadawi, Soto, 2013) was to obtain the data on the dynamics of key macroeconomic indicators of post-conflict countries with different currency regimes (Table 1).

The author’s own analysis confirms that the vast majority of post-conflict countries were characterized by the regimes of fixed and regulated ex-
change rates, which provided for a gradual transition to the floating rate regime (Table 2). During the first three years central banks usually do not allow significant fluctuations in official exchange rates.

Measures to support official exchange rates are usually aimed at ensuring price stability. The experience of Angola and Serbia confirms the ability of the regulator to influence the reduction of inflation – from 98.22% to 43.54% and 95.01% to 19.49% respectively (Table 3).

In addition, stimulating economic growth it is necessary to ensure access to credit resources. Most post-conflict countries are characterized by the reduction of interest rates on loans (Table 4). Compared with the first year, in the second year the most significant reduction was in Tajikistan (from 50.89% to 26.24%), Serbia (from 34.50% to 19.71%).

### Table 1. Macroeconomic indicators of conflict economies according to exchange rate systems

| № | Indicator                                      | Fixed exchange rate | Regulated exchange rate | Floating exchange rate |
|---|-----------------------------------------------|---------------------|-------------------------|------------------------|
| 1 | Change in GDP per capita, %                   | 3.0                 | 2.7                     | 2.1                    |
| 2 | Growth of labor productivity, %               | 2.3                 | 1.9                     | 1.7                    |
| 3 | Annual inflation rate, %                      | 4.7                 | 7.6                     | 16.3                   |
| 4 | Domestic loans to the private sector, % of GDP| 23.6                | 21.1                    | 15.6                   |
| 5 | Tax revenues, % of GDP                        | 11.4                | 13.0                    | 15.1                   |
| 6 | Military expenditures, % of GDP               | 2.3                 | 2.8                     | 2.1                    |
| 7 | Export growth, % of GDP                       | 7.8                 | 7.6                     | 5.2                    |
| 8 | Foreign aid, % of GDP                         | 11.1                | 10.5                    | 17.4                   |
| 9 | Direct foreign investments, % of GDP          | 1.3                 | 1.7                     | 2.3                    |

*Note: average of five years after conflict ended.*

### Table 2. Official exchange rate, local currency per US dollar

| Country       | Year** 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|---------------|----------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Angola        | 74.61    | 83.54  | 87.16  | 80.37  | 76.71  | 75.03  | 79.33  | 91.91  | 93.93  | 95.47   |
| Cambodia      | 2689.00  | 2545.25| 2450.83| 2624.08| 2946.25| 3744.42| 3807.83| 3840.75| 3916.33| 3912.08 |
| Republic of Congo | 711.98  | 733.04 | 696.99 | 581.20 | 528.28 | 527.47 | 522.89 | 479.27 | 447.81 | 472.19  |
| Croatia       | 5.43     | 6.16   | 6.36   | 7.11   | 8.28   | 8.34   | 7.87   | 6.70   | 6.03   | 5.95    |
| Georgia       | 1.67     | 1.78   | 1.69   | 1.65   | 1.66   | 1.77   | 2.27   | 2.37   | No data | No data   |
| Indonesia     | 9159.32  | 9141.00| 9698.96| 10389.94| 9090.43| 8770.43| 9386.63| 10461.24| 11865.21| 13389.41|
| Liberia       | 54.91    | 57.10  | 58.01  | 61.27  | 63.21  | 68.29  | 71.40  | 72.23  | 73.51  | 77.52   |
| Macedonia     | 64.35    | 54.32  | 49.41  | 49.28  | 48.80  | 44.73  | 41.87  | 44.10  | 46.49  | 44.23   |
| Serbia        | 66.91    | 64.40  | 57.59  | 58.38  | 66.71  | 67.15  | 58.45  | 55.72  | 67.58  | 77.73   |
| Sierra Leone  | 2099.03  | 2347.94| 2701.30| 2889.59| 2961.91| 2985.19| 2981.51| 3385.65| 3978.09| 4349.16 |
| Solomon Islands | 7.48   | 7.53   | 7.61   | 7.65   | 7.75   | 8.06   | 8.06   | 7.64   | 7.36   | 7.30    |
| Tajikistan    | 0.78     | 1.24   | 2.08   | 2.37   | 2.76   | 3.06   | 2.97   | 3.12   | 3.30   | 3.44    |

*Note: * average over year. ** year after the end of the conflict.*
Table 3. Inflation (consumer prices), annual %

| Country    | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Angola     | 98.22  | 43.54  | 22.96  | 13.30  | 12.25  | 12.47  | 13.73  | 14.47  | 13.47  | 10.29   |
| Croatia    | 4.34   | 4.13   | 6.40   | 4.02   | 4.61   | 3.78   | 1.67   | 1.77   | 2.06   | 3.32    |
| Georgia    | 1.73   | 7.11   | 8.54   | -0.94  | -0.51  | 3.07   | 4.00   | 2.13   | No data| No data |
| Indonesia  | 13.11  | 6.41   | 9.78   | 4.81   | 5.13   | 5.36   | 4.28   | 6.41   | 6.39   | 6.36    |
| Liberia    | 7.83   | 10.83  | 7.34   | 11.39  | 17.49  | 7.43   | 7.29   | 8.49   | 8.63   | 7.57    |
| Macedonia  | 2.31   | 1.10   | 0.93   | 0.16   | 3.21   | 2.25   | 8.33   | -0.74  | 1.51   | 3.90    |
| Serbia     | 95.01  | 19.49  | 9.88   | 1.03   | 16.12  | 11.72  | 6.39   | 12.41  | 8.12   | 6.14    |
| Solomon Islands | 6.99 | 7.33  | 11.22  | 7.67   | 17.32  | 7.09   | 1.05   | 7.34   | 5.91   | 5.39    |

Note: years after the end of the conflict.

Table 4. Lending interest rate, %

| Country          | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Angola           | 96.12  | 82.33  | 67.72  | 19.51  | 17.70  | 12.53  | 15.68  | 22.54  | 18.76  | 16.66   |
| Republic of Congo| 22.00  | 20.67  | 18.00  | 18.00  | 18.00  | 17.67  | 15.33  | 15.00  | No data| No data |
| Croatia          | 22.52  | 15.47  | 15.75  | 14.94  | 12.07  | 9.55   | 12.84  | 11.58  | 11.75  | 11.19   |
| Georgia          | 17.87  | 15.85  | 15.00  | 14.81  | 13.59  | 11.91  | 12.49  | 12.62  | No data| No data |
| Indonesia        | 15.98  | 13.86  | 13.60  | 14.50  | 13.25  | 12.40  | 11.80  | 11.66  | 12.61  | 12.66   |
| Liberia          | 18.10  | 17.03  | 15.50  | 15.05  | 14.40  | 14.19  | 14.24  | 13.75  | 13.52  | 13.49   |
| Macedonia        | 18.36  | 16.00  | 12.44  | 12.13  | 11.29  | 10.23  | 9.68   | 10.07  | 9.48   | 8.87    |
| Serbia           | 34.50  | 19.71  | 15.48  | 15.33  | 16.83  | 16.56  | 11.13  | 16.13  | 11.78  | 17.30   |
| Sierra Leone     | 22.17  | 20.00  | 22.08  | 24.58  | 24.00  | 25.00  | 24.50  | 22.17  | 21.25  | 21.00   |
| Solomon Islands  | 14.29  | 14.12  | 13.92  | 14.12  | 14.44  | 15.26  | 14.43  | 13.17  | 11.28  | 10.77   |
| Tajikistan       | 50.89  | 26.24  | 25.59  | 21.05  | 14.21  | 16.73  | 20.31  | 23.28  | 24.16  | 22.96   |

Note: years after the end of the conflict.

Table 5. Domestic credit provided by financial sector, % of GDP

| Country         | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Angola          | 6.63   | 6.74   | 2.46   | -5.01  | 1.87   | 9.45   | 29.18  | 19.27  | 16.64  | 15.48   |
| Georgia         | 32.93  | 33.18  | 34.12  | 34.94  | 42.91  | 48.56  | 52.58  | No data| No data| No data |
| Indonesia       | 41.66  | 40.58  | 36.77  | 36.97  | 34.18  | 36.55  | 40.77  | 43.43  | 43.44  | 46.72   |
| Cambodia        | 5.03   | 5.43   | 5.29   | 6.17   | 6.87   | 7.16   | 6.55   | 6.42   | 5.57   | 5.63    |
| Liberia         | 227.78 | 188.37 | 185.78 | 159.72 | 143.22 | 113.39 | 31.91  | 34.63  | 33.89  | 37.78   |
| Macedonia       | 15.64  | 16.12  | 19.66  | 18.55  | 21.78  | 32.67  | 40.91  | 43.13  | 47.11  | 45.24   |
| Republic of Congo| 8.65  | 13.34  | 11.83  | 12.97  | 11.34  | 1.10   | -8.28  | -6.85  | -15.25 | -14.36  |
| Serbia          | 33.01  | 16.23  | 18.72  | 24.02  | 28.00  | 24.57  | 30.66  | 39.05  | 45.20  | 56.16   |
| Solomon Islands | 27.57  | 29.42  | 31.34  | 35.75  | 37.71  | 35.75  | 27.17  | 14.14  | 11.77  | 21.01   |
| Sierra Leone    | 30.34  | 27.26  | 22.56  | 18.51  | 17.43  | 8.61   | 11.99  | 14.18  | 17.08  | 16.35   |
| Tajikistan      | 22.09  | 20.79  | 17.92  | 22.34  | 18.05  | 15.16  | 6.92   | 13.01  | 13.77  | 16.96   |
| Croatia         | 37.67  | 38.29  | 41.36  | 39.64  | 39.98  | 45.11  | 53.19  | 54.39  | 56.83  | 62.85   |

Note: years after the end of the conflict.
At the same time, as a result of reduction of interest rates there was no sharp increase in domestic lending by financial institutions due to the impact of such factors as loan security, high level of risks and poor financial condition of borrowers (Table 5).

There is an opinion (Dod, Smith, 2009) that the key measures of macroeconomic policy regulation in post-conflict countries should be as follows (Figure 1).

A similar approach can be traced in the study “Economic Governance in War Torn Economies: Lessons Learned from the Marshall Plan to the Reconstruction of Iraq”, in which USAID experts (Lewarne, Snelbecker, 2004) identified several key provisions for successful economic recovery, in particular, in the area of monetary and fiscal policy (Figure 2).

In general, most post-conflict countries are characterized by GDP growth after the ending of military conflicts (Table 6). The largest increase was observed in the Republic of Congo (7.58%), Indonesia (5.50%) and Tajikistan (5.30%). At the same time, in 2009 (the first year after the end of hostilities) Georgia's GDP continued to decline, which could be explained by the impact of the economic crisis.

An influx of foreign direct investments plays an important role in economic recovery, especially in export-oriented industries (Table 7). At the same time, success in fighting corruption and creating an appropriate business climate determines the further dynamics of attracting financial resources.

Figure 1. Key measures of fiscal and monetary policy in post-conflict recovery

MONETARY POLICY
- control over price stability;
- exchange rate management and/or monetary reform;
- improvement of payment systems;
- licensing of commercial banks;
- strengthened supervision over the activities of commercial banks;
- review of banking legislation

FISCAL POLICY
- introduction of control over expenditures;
- revenue management;
- control over indirect taxes;
- control over direct taxes;
- reform of tax policy;
- control over expenditures of state institutions;
- tax planning

Figure 2. Some provisions of successful post-conflict economic recovery in the sphere of monetary and fiscal policies

MONETARY POLICY
- regulation of money turnover, launching (resetting) of the currency market, formation of market data, ensuring the independence of the central bank;
- currency and anti-inflationary policies should be balanced between the provision of economic stabilization and export competitiveness;
- inflationary restrictions (the proposed corridor within 5-10%);
- orientation towards the creation of payment systems, regulation of the banking sector, gradual transition from simple financial instruments to more complex ones

FISCAL POLICY
- priority of improving the policy of state expenditures and budget execution, in particular, through modernization of the treasury system to control and ensure more efficient use of funds;
- establishment of tax policies should be consistent with the abilities of tax administration ranging from simple indirect taxes to more complex ones such as value added tax;
- integration of capital expenditures and investment projects in the state investment programs

Source: Dod, Smith, 2009.

Source: Lewarne, Snelbecker, 2004.
In the post-conflict period the share of tax revenues in GDP is usually at a stable level, which reflects their gradual change in accordance with the dynamics of GDP (Figure 3). The important element of fiscal policy is the fight against the “shadow” economy, the development of which can be observed during the military hostilities and the existing legal vacuum. The redistributive role of the state in the processes of social reproduction is gradually changing. Therefore, Angola, Croatia, Georgia and Sierra Leone are characterized by the decreasing share of public expenditures in GDP (Table 8). However, in Liberia, where the fiscal capacity of public authorities is sufficiently different, the share of such expenditures is stable.

### Table 6. GDP growth, annual %

| Country       | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Angola        | 5.25   | 10.88  | 18.26  | 20.74  | 22.59  | 13.82  | 2.41   | 3.41   | 3.92   | 5.16    |
| Republic of Congo | 7.58   | 3.80   | 4.58   | 0.81   | 3.48   | 7.76   | 6.24   | −1.58  | 5.57   | 7.47    |
| Croatia       | 5.87   | 6.65   | 1.86   | −0.94  | 3.77   | 3.43   | 5.25   | 5.56   | 4.08   | 4.16    |
| Georgia       | −3.78  | 6.25   | 7.22   | 6.35   | 3.39   | 4.62   | 2.77   | −      | −      | −       |
| Indonesia     | 5.50   | 6.35   | 6.01   | 4.63   | 6.22   | 6.17   | 6.03   | 5.56   | 5.02   | 4.79    |
| Liberia       | 2.62   | 5.28   | 8.04   | 9.53   | 7.15   | 5.30   | 6.10   | 8.20   | 7.99   | 8.70    |
| Macedonia     | 1.49   | 2.22   | 4.67   | 4.72   | 5.14   | 6.47   | 5.47   | −0.36  | 3.36   | 2.34    |
| Serbia        | 4.99   | 7.12   | 4.42   | 9.05   | 5.54   | 4.90   | 5.89   | 5.37   | −3.12  | 0.58    |
| Solomon Islands | 4.90  | 5.42   | 6.95   | 7.32   | 7.09   | −4.73  | 6.90   | 12.93  | 4.66   | 3.01    |
| Tajikistan    | 5.30   | 3.70   | 8.30   | 10.20  | 10.80  | 11.00  | 10.30  | 6.70   | 7.00   | 7.80    |

Note: years after the end of the conflict.

### Table 7. Foreign direct investment (net inflows), % of GDP

| Country         | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Angola          | 25.21  | 11.19  | −4.62  | −0.09  | −1.48  | 1.99   | 2.92   | −3.91  | −2.90  | −5.98   |
| Cambodia        | 2.14   | 2.47   | 4.38   | 8.37   | 5.92   | 7.78   | 6.60   | 3.24   | 3.68   | 3.06    |
| Republic of Congo | −3.04 | −4.84  | 6.59   | 6.28   | 1.90   | 13.16  | 19.24  | 31.43  | 17.13  | 13.28   |
| Croatia         | 2.08   | 2.27   | 3.70   | 6.21   | 4.85   | 4.23   | 3.55   | 5.27   | 3.11   | 3.95    |
| Georgia         | 6.06   | 7.47   | 7.51   | 5.25   | 5.93   | 10.60  | 11.25  | −      | −      | −       |
| Indonesia       | 1.35   | 1.60   | 1.83   | 0.90   | 2.03   | 2.30   | 2.31   | 2.55   | 2.82   | 2.33    |
| Liberia         | 15.87  | 15.05  | 17.86  | 17.81  | 33.36  | 11.06  | 34.99  | 84.95  | 37.26  | 35.98   |
| Macedonia       | 2.84   | 2.41   | 5.44   | 2.32   | 6.23   | 8.80   | 6.17   | 2.76   | 3.20   | 4.84    |
| Serbia          | 1.45   | 3.04   | 6.92   | 3.86   | 6.01   | 13.90  | 10.98  | 8.23   | 6.87   | 4.29    |
| Sierra Leone    | 0.84   | 0.63   | 4.27   | 5.57   | 3.12   | 4.42   | 2.12   | 4.43   | 9.11   | 32.30   |
| Solomon Islands | −0.71  | 0.13   | 9.70   | 16.66  | 12.36  | 8.13   | 24.71  | 13.54  | 2.33   | 5.04    |
| Tajikistan      | 2.27   | 0.62   | 2.74   | 0.88   | 2.95   | 2.04   | 13.10  | 2.36   | 11.96  | 9.68    |

Note: years after the end of the conflict.
It is also necessary to investigate the successful experience of some post-conflict countries. For example, the financial policy of Angola after the end of the civil war was based on active involvement of external resources for the restoration of the national economy. Given the high level of corruption in 2004, cooperation with international financial institutions was limited. That is when China became the key donor while its government was interested in oil deposits in Angola. Development of cooperation with Asian investors made it possible to increase several times the volume of energy exports, which in turn led to increased tax revenues to the budget. According to D. Zondwe (Zongwe, 2010), the post-war development model of Angola can be used for other African countries, which are rich in natural resources (Chad, Congo, Côte d’Ivoire and others). Despite the progress made in addressing the issues of the social sphere and national defense, the government failed to overcome the “Dutch disease” making the economy deformed towards the energy sector, which is quite sensitive to fluctuations in energy prices and depending on external lenders, especially China.

Economic success of the post-conflict development in Azerbaijan is also related to oil deposits. The “Production Sharing Agreement” regarding the deep-sea deposits, the so-called “Contract of the Century”, signed by Azerbaijan with companies from the USA, Great Britain, Russia, Turkey, Norway, Japan and Saudi Arabia, gave

### Table 8. Government expense, % of GDP

| Country      | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Angola       | 32.52  | 19.36  | 27.27  | 23.86  | 22.48  | 23.55  | 23.75  | 26.06  | 28.64  | 26.03   |
| Croatia      | 39.99  | 40.42  | 39.48  | 38.42  | 36.96  | 35.66  | 34.73  | 34.66  | 34.17  |         |
| Georgia      | 30.94  | 26.35  | 24.35  | 25.38  | 24.38  | 25.66  | 25.74  | No data| No data| No data |
| Liberia      | 0.25   | 0.21   | 0.18   | 0.23   | 0.33   | No data| 0.29   | 0.29   | 0.34   | 0.34    |
| Sierra Leone | 21.62  | 18.57  | 17.80  | 17.50  | 16.43  | 12.80  | 15.86  | 17.23  | 13.46  | 13.07   |

*Note: years after the end of the conflict.*
a significant impetus to the development of the whole economy of the country. The received revenues were aimed at infrastructure development, assistance to the poor, improvement in the quality of healthcare and education, which made it possible to significantly improve the country’s position in the rating “Doing Business” (Girod, 2015).

In addition to use of natural resources, an important role in restoring a country like Liberia was played by its “flag-of-convenience” status with attractive conditions of registration for foreign ship owners. This income item provided about 18 million US dollars annually since 1996, which is the equivalent of a quarter of the country’s budget in 2002–2003 (Africa South of the Sahara, 2004). The new government of the country managed to reduce the level of dependence on this source of revenues and expanded the base of financial resources, directing these funds to address the most urgent economic problems.

An important role in settling the Aceh conflict (1975–2005) in Indonesia was played by financial decentralization. In accordance with the Memorandum of Understanding between the Government of Indonesia and the "Free Aceh Movement", the local authorities were granted special powers, in particular, the rights to:

- attract foreign loans and increase the interest rate set by the central bank;
- introduce local taxes and raise the rates to the national taxes;
- retain 70% of revenues from the natural resources of the province (this applies mainly to hydrocarbon deposits).

It should be noted that post-conflict reconstruction of Indonesia was complicated by the consequences of tsunami considering that housing and infrastructure were the priority sphere for reconstruction. In addition, there was an unequal distribution of aid from international donors, the impact of which was also significant (Fan, 2014).

An ethnic conflict took place in Macedonia in 2001. It led to a 5% reduction in GDP, rising inflation, outflow of capital, the reduction of gold and foreign exchange reserves. Due to the expansion of authority for certain regions with the preservation of the unitary status of the country and active support of international organizations, in particular, of the European Union, governments of other countries they managed to restore economic growth and improve investment climate in a rather short period.

The conflict may have an interethnic character as it was in Tajikistan during 1992–1997. The rise in prices on cotton and aluminum in 1997–2007 led to stabilization of this agrarian-industrial economy of Central Asia. At the same time, there are still a lot of problems related to food and energy

---

**Figure 4.** The matrix of interaction between government and central bank

*Note: evaluation of events by central bank appeared above the diagonal in each box, and evaluation of events by government appeared below the diagonal in each box.*
security, high rates of poverty, religious extremism, smuggling, drugs and weapons transit, human trafficking. In resolving of these issues the government actively cooperates with the World Bank Group and regional financial institutions, in particular, the Islamic Bank for Development (Toshmuhammadov, 2004).

A special attention should be paid to the issue of coordination of the monetary and fiscal policies, especially in the context of post-conflict reconstruction, taking into account the independence of institutions that carry them out – the central bank and the government, respectively.

Alan Blinder (1982) proposes to assess the possible scenarios of events depending on the actions (measures of restrictive or expansionist nature) of the two participants of interaction in the range from 1 (the best) to 4 (the worst) (Figure 4).

At the same time, the author assumes that among the two options of mixed policies (right upper corner and lower left corner) the most optimal for the economy as a whole is a combination of expansionary monetary policy (a policy of “cheap money”) with restraining fiscal policy (a policy of limited expenditures with an increase in taxes). However, acting without coordination and in their own interests (curbing of inflation for the central bank and increasing economic activity for the government), the most likely outcome is a balance in the lower left corner. But the strategies of interaction between the central bank and the government in post-conflict countries can differ significantly. This issue remains insufficiently investigated. It should be noted that fiscal policy may have a more favorable basis comparatively with monetary policy.

The experience of former USSR countries and Yugoslavia, which proclaimed their independence and which earlier had not possessed any statehood and sovereignty (in particular, Azerbaijan, Bosnia and Herzegovina, Tajikistan, Croatia), showed that they had some experience to organize and ensure institutional provision of fiscal policy. At the same time, in the sphere of monetary policy, which had previously been carried out in a centralized way, there were much more problems, in particular, a choice between the introduction of the national currency or transition to the currency of another country, formation of the institute of national central banks etc.

CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

The strategies of interaction between the central bank and the government can be adjusted in accordance with the priorities of the economy’s post-conflict recovery. Such situation may occur when the government’s ability to replenish the budget is limited and the only source of replenishment of the state treasury is money emission. The analysis of key macroeconomic indicators of the countries, that successfully overcame the consequences of hostilities, confirms the key role of the central bank in stimulating economic growth.

The results of the research also indicate the importance of geographic location and available natural resources for the restoration of post-conflict countries, which makes it possible for them to focus on the development of the most competitive industries on the global market using the existing financial potential of the state.

Solving the problems of post-conflict recovery it seems expedient to build econometric models of the impact of financial policy measures on economic development and national security.
REFERENCES

1. Adam, C., Collier, P., & Davies, V. (2008). Post-conflict monetary reconstruction. *The World Bank Economic Review*, 22(1), 87-112. Retrieved from https://ora.ox.ac.uk/objects/uuid:ff79ea1b-b8f5-4d7b-af35-91d552fe082e

2. Addison, T., Murshed, S. (2001). *The fiscal dimensions of conflict and reconstruction*. – WIDER Discussion Papers, World Institute for Development Economics (UNU-WIDER), 2001. № 2001/49. Retrieved from https://www.econstor.eu/bitstream/10419/52744/1/333455363.pdf

3. Africa South of the Sahara 2004. London and New York: Europa Publications.

4. Blinder, A. (1982). Issues in the coordination of monetary and fiscal policy. *NRER Working Paper*, 982. Retrieved from http://www.nber.org/papers/w0982.pdf

5. Bobko, A. (2008). Vzaimodeystvie pravitel'stva i tsentral'nogo banka: teoretiko-igrovoy analiz. *Bankovskii vesnik*, 34, 123-134. Retrieved from https://www.nbrb.by/bv/articles/1524.pdf

6. Coats, W. (2007). Monetary Policy Issues in Post Conflict Economies. *Peace and the Public Purse: Economic Policies for Postwar Statebuilding*. Retrieved from https://works.bepress.com/warren_coats/9/download

7. Dod, D., & Smith, J. (2009). A Guide to Economic Growth in Post-Conflict Countries. *United States Agency for International Development*. Retrieved from http://pdf.usaid.gov/pdf_docs/Pnado408.pdf

8. Elbadawi, I., & Soto, R. (2013). Exchange Rate Regimes for Post-Conflict Recovery. *Philip Oxsorn Part I: Case Studies*, 225. Retrieved from https://erf.org.cw/wp-content/uploads/2014/03/748.pdf

9. Fan, L. (2014). Aceh's unfinished recovery. Retrieved from http://www.irannews.org/report/100972/acehs-unfinished-recovery

10. Fox, W. (2007). Fiscal decentralization in post-conflict countries. *United States Agency for International Development*. Retrieved from http://pdf.usaid.gov/pdf_docs/Pnado909.pdf

11. Girod, D. (2015). Explaining post-conflict reconstruction. *Oxford University Press.*

12. Lewarne, S., & Snelbecker, D. (2004). Economic Governance in War Torn Economies: Lessons Learned from the Marshall Plan to the Reconstruction of Iraq Long Report. *United States Agency for International Development*. Retrieved from http://www.oecd.org/derec/unitedstates/36144028.pdf

13. Memorandum of Understanding between the Government of the Republic of Indonesia and the Free Aceh Movement. (2005). URL: Retrieved from http://www.acehpeaceprocess.net/pdf/mou_final.pdf

14. Pekarskiy, S., Ataman-chuk, M., Merzlyakov, S. (2007). Vzaimodeystvie fiscal'noy i monetarnoy politiki v eksporto-orientirovanny ekonomike. Retrieved from https://www.hse.ru/data/2010/05/06/1216469503/WP12_2007_02.pdf

15. Sargent, T., & Wallace, N. (1981). Some unpleasant monetarist arithmetic. *Federal reserve bank of minneapolis quarterly review*, 5(3), 1-17. Retrieved from https://www.minneapolisfed.org/research/qt/q531.pdf

16. Schiavo-Campo, S. (2007). Budgeting in Postconflict Countries in Budgeting and Budgetary Institutions, ed. A. Shah. The World Bank, pp. 435-460. Retrieved from http://siteresources.worldbank.org/PSGLP/Resources/BudgetingandBudgetaryInstitutions.pdf

17. Starr, M. (2004). Monetary Policy in Post-Conflict Countries: Restoring Credibility. *WPS, American University, Washington*, 7, 3-28. Retrieved from http://w.american.edu/cas/economics/repec/amu/workingpapers/200409-02.pdf

18. Toshmukhammadov, M. (2004). Grazhdanskaya voyna v Tadzhikistane i postkonfliktное восстановление. Retrieved from http://src-h.slav.hokudai.ac.jp/pdf_seminar/040607tasmuhammadov.pdf

19. World bank Open Data. Retrieved from http://data.worldbank.org/

20. Zongwe, D. (2010). On the road to post conflict reconstruction by contract: The Angola Model. Retrieved from https://ssrn.com/abstract=1730442