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Economic challenges of North Macedonia’s bridging toward European Union, with focus on real and nominal convergence

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Abstract

The paper examines real and nominal convergence of North Macedonia toward European Union (EU) and European Monetary Union (EMU), with regard to real and external sector developments as well as fiscal and monetary developments in the country, in line with the Copenhagen and Maastricht criteria. Hence, the North Macedonia’s economic developments in prices, fiscal balances and debt ratio, exchange rates and long-term interest rates are reviewed from a backward – looking perspective, focusing mainly on the last 10 years. The results of the paper suggest that the country is on a good shape, with respect to transition developments, as well as real sector and external sector developments, thus enhancing the advancement of the country’s EU approximation path and is far away from monetary integration.

Keywords: European Union, European Monetary Union, Macedonia, economic convergence, Maastricht and Copenhagen criteria

Introduction

Political and economic enlargement, covering the EU foreign policy agenda, is one of the most powerful tools of European Union policy. This enlargement serves the EU's strategic interests related to stability, at both political and economic sense, increasing security and strengthening the policies related to conflict prevention (Dauti, 2008). Structural enlargement of EU countries has helped to increase prosperity and growth opportunities of the pretending countries for EU membership. The current enlargement agenda covers the countries of the Western Balkans (Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Montenegro and Serbia) and Turkey, which have been given the prospect of becoming EU members once they meet the necessary conditions.

The main goal of transition countries' foreign policy after the end of the period of socialism is full membership in the European Union. The reasons for such an orientation are that the economies of these countries gain the opportunity to participate in European financial resources, enabling these countries to obtain positive financial spillover effects from integrated markets. Accordingly, North Macedonia's strategic objectives include membership in the European Union, by which both, the entire political spectrum and the social entities agree upon.

However, due to insufficient efforts of North Macedonia's past governments to meet the preconditions for EU membership, made the current political path toward EU integration process sensitive and difficult, although politically not impossible. It is worth noting that the current government has implemented favorable policies towards fulfilling the political preconditions for the country's EU integration process, such as the policy of regulating good neighborly relations, especially with Greece and Bulgaria. In the medium term, the same policies are expected to be followed with other surrounding countries; such are Albania, Kosovo and Serbia, especially, when it comes to strengthening bilateral economic relations.

This policy-oriented paper based on a concrete statistical figure analyzes the main economic challenges of North Macedonia regarding the country's integration profile toward European Union with a focus on the economic criteria for membership, identified by the European Commission in Copenhagen and Maastricht. The special focus of the paper is the real and nominal convergence that is followed up by the EU integration process. The second part of the paper, based on the Copenhagen criteria, will outline a theoretical and empirical review related to the ability of the country's economy to cope with the competitive pressures and market forces in the European Union. The third part of the paper will outline the five Maastricht's economic convergence criteria that North Macedonia must meet as a precondition for highly hypothetical EMU (European Monetary Union) accession. Both of these parts will outline the stylized facts over the real and nominal convergence on the North Macedonia's path toward European Union. The fourth part of the paper will conclude the study and give policy implications, by outlining also a potential gap for future research.

The country economic profile based on the Copenhagen Criteria

Theory overview

Enlargement of the European Union is a very important mechanism for economic and political integration. Given European indicators, such as the size of the community, of almost 4 million square kilometers and almost 500 million inhabitants and the total value of GDP at almost $ 12 billion, unintegrated states will always be willing to be part of this world economic power.

Therefore, for a candidate country to become a full member of the EU, it must meet the Copenhagen Criteria, which are related to functioning of a market economy, the existence of democratic institutions and a positive affirmation of human rights. More specifically the Copenhagen criteria include:1) Free interaction of market forces (balance of demand and supply in goods and labor market, price and trade liberalization); 2) No significant entry and exit barriers of the firms; 3)Well established legal system (regulation of property rights, control of contract enforcement); 4) Macroeconomic stability (achieved price stability and sustainable public finances and external accounts); 5)Broad consensus on the foundation of economic policy; 6) Well developed financial sector that boost private investments and savings; 7) Existence of functioning market economy in a climate of political stability and predictability; 8)Well developed human and physical capital and 9) established institutional support for competition through competition policy, state aid and support for SMEs. (Efendic, 2004; Dauti, 2009). Because of these criteria, many candidate countries have difficulty accessing the European Union.

Empirical investigation on the Macroeconomic performance

To outline the economic profile of the North Macedonia, with respect to meeting the Copenhagen EU integration criteria, we have provided a descriptive analysis based on the EBRD transition reports, which shows much about the ability of the country to cope with competitive pressures in the European Union. Following a few relatively good years of economic performance, the slow-down that began in 2016 continued its trend through 2017 and into the first part of 2018. In 2017 the growth rate of the North Macedonia's economy was zero. Although a bad first half of the year happened, when the crisis was still in full oscillation, the growth rate was balanced by recuperation in the second half following the configuration of a new government. During the second half of 2017, the growth rate was financed mainly by the increase of private consumption and net exports[1], thus, conveying the overall growth in the first half of 2018 to 1.6 per cent. Growth is expected to pick up in the short term, due to the increase of the minimum wage and other social protection measures on private consumption (NBRM, 2018). With respect to price developments, inflation curved positively in 2017 after three years of price declines, averaging 1.4 per cent. (NBRM, 2018)

Table 1. Major economic indicators in percentage

Macedonia	2014	2015	2016	2017	2018	2019 projected	Average
GDP growth	3.6	3.8	2.9	0.0	2.0	2.5	2.5
Inflation (average)	-0.3	-0.3	-0.2	1.4	1.8	0.5	0.5
Government balance/GDP	-4.2	-3.5	-2.7	-2.7	-2.9	-3.2	-3.2
Current account balance/GDP	-0.5	-2	-2.7	-1.3	-1.1	-1.5	-1.5
Net FDI/GDP [neg. sign = inflows]	-2.3	-2.2	-3.3	-2.3	-3.3	-2.7	-2.7
External debt/GDP	64.9	68	70.7	77.1	56.1	67.4	67.4

Source: Transition report, 2018-19 and author's calculation

The sustainability of public finances was managed to be kept at stable levels. Public debt has been rising progressively amongst continuous fiscal deficits. The government's fiscal deficit in 2018 was 2.7 per GDP, slightly lower than the projected level of 2.9 when the budget was reviewed in August 2018 (NBRM, 2018). The level of public debt is still relatively modest at 47 per cent of GDP, and within the Maastricht criteria of 60 per cent of GDP, but has been rising gradually in 2019[2].

The credit outlooks of the country and investor confidence are improving. In February 2018, Fitch revised the outlook on its BB rating for North Macedonia from negative to positive to reflect the fact that the country's domestic political situation is stabilizing[3]. Meanwhile, international investors also appear to be showing increased confidence in the country's prospects, reflected to some extent in the historically low interest rate of 2.75 per cent on a seven-year €500 million Eurobond issued in January 2018 (EBRD Transition Report, 2018).

[1]Gross exports rising by 18.0 per cent, helping to keep the current account deficit at low levels, of just about 1.0 per cent of GDP in 2017, among the lowest in the region (NBRM, 2018)

[2]A further rise of the public debt is expected to happen, due to the new policy measures adopted by the government, including business incentives for roll-out of additional employment and exports, based on the law of the financial support of investments, and an increase in the minimum wage.

[3]North Macedonia is rated BB-/Stable by Standard & Poor's and BB/Positive by Fitch (and not rated by Moody's)

Major structural reforms suggested by the European Council report, in June 2018, which set out the path toward opening accession talks with North Macedonia, include; fight against corruption[4] and improvements on the banking sector[5]. Based on this report, the country is performing well with respect to World Bank's *Doing Business* ranking[6], energy efficiency with the establishment of a new energy law, which is in place[7], improvements on the cross-border energy integration and infrastructure improvements[8].

Transition progress of North Macedonia

We use the EBRD transition indices to analyze the ability of the North Macedonia's economy to meet the Copenhagen criteria related to market efficiency. Using these data, we come up with two transition progress indicators at both first and second stage to check out for the convergence of the country's economy toward more advanced EU countries.

Table 2. Transition indicators

	Transition indicators	2015	2016	2017	2018	2019
1	Large scale privatization	3.3	3.3	3.3	3.3	3.3
2	Small scale privatization	4	4	4	4	4
3	Governance and enterprise restructuring	2.7	2.7	2.7	2.7	2.7
4	Price liberalization	4.3	4.3	4.3	4.3	4.3
5	Trade and exchange rate liberalization	4.3	4.3	4.3	4.3	4.3
6	competition policy	2.3	2.3	2.3	2.3	2.3
7	Banking reforms and interest rate liberalization	3	3	3	3	3
8	Securities markets and non-bank financial institutions	2.7	2.7	2.7	2.7	2.7
9	Infrastructure reforms	2.7	2.7	2.7	2.7	2.7
10=9+5+7+8	Transition reform progress at the first stage	12.7	12.7	12.7	12.7	12.7
11	Private sector as a share of GDP	70	70	70	70	70
12=1+3+6+7+8+9	Transition reform progress at the second stage	16.7	16.7	16.7	16.7	16.7
13	FDI as a % of GDP	2.4	3.5	2.3	2.9	3.2
14=sum (1:9)/9	Average value of transition indices	3.26	3.26	3.26	3.26	3.26

Source: Transition report, 2018-19 and author's calculation

[4]North Macedonia is now ranked joint 107th (out of 180 countries), the lowest in the Western Balkans region, in Transparency International's Corruption Perceptions Index, down from 90th last year and 66th the previous year (Transparency International, 2018)

[5]Based on EBRD transition report, **banking sector stability has been strong but the number of banks remains large relative to the size of market.** There are still 16 banks in North Macedonia, which is a large number of banks relative to the market size of the country.

[6] Reaching 10th position in the 2019 report (published in late October 2018) compared with 11th position in the 2018 report (World Bank, 2018).

[7]In May 2018 the parliament adopted a new Energy Law aimed at fully transposing EU energy legislation. The law envisages further liberalization of the electricity market from 2019, allowing households and small firms to choose their supplier.

[8]The construction of the 28 km-long motorway section in the southern part of the country, leading to the Greek border, was completed in April 2018. With this work, the southern section of the Pan-European Road Corridor X, running between central Europe and Greece via Serbia and North Macedonia, has been finalized. Also, North Macedonia has invited tenders for the construction of a 34 km-long second section, of railway Corridor VIII, linking Bulgaria and Albania via NorthMacedonia. At the same time, North Macedonia and Kosovo have launched the construction of a new EU-funded joint border crossing which should facilitate enhanced cross-border trade.

According to transition indicators, North Macedonia has achieved excellent results in terms of price liberalization and foreign trade liberalization, with respective indices both at 4.3 per cent indicating that North Macedonia's economy is opening in the trading area, which is achieved through the creation of a free trade area in the region in accordance with the Stability Pact. These results are showing that North Macedonia is in good shape on its road toward free market functionality, thus approaching to the level of the standards of advanced industrialized countries.

We note that the biggest problems for North Macedonia are in the area of competition policy, where the index is smaller (2.3). Overall infrastructure reform indices (2.6), securities markets and non-bank financial institutions (2.7), as well as the banking sector and interest rate liberalization (3) do not show good performance indicators for North Macedonia's market economy. On the other hand, based on the average value of the transition indices (row 14), which is 3.26, we note that North Macedonia's potential to cope with post-accession competition pressures, within EU is relatively high. Following Johnson (2006) and Mrak and Rojec (2013), we also use the transition reform progress on the first and second stage, respectively. The transition indices are important for increasing the FDI into the country (Dauti, 2015). From the table 2, we note a cyclical movement of the FDI a share of GDP value, in relation to a constant movement of the transition progress reforms through years. The explanation that may lay behind the scope of this result can be addressed to the fact that although the transition progress is of crucial importance for the inward stock of FDI for transition economies, this importance come to force only if the country offers some basic attractiveness which are related to the main country structural characteristics, like country market size or cost of production factors (UNCTAD, 1998).Therefore, other location country specific advantages (i.e. country market size cost of production) may be more important than transition progress for the inward stock of FDI in transition economies (Dauti, 2015).

Maastricht criteria and beyond

The examination of North Macedonia in respect to European Monetary Union (EMU's) Maastricht Criteria[9] is prepared in accordance with article 140 (1)[10] of the Treaty of the Functioning of the European Union[11]. This examination is considering whether a high degree of sustainable nominal and real convergence has been achieved in the country, concerned by reference to the fulfillment of the convergence criteria (price stability, public finances, exchange rate stability and long-term interest rates).

[9]The examination of the economic convergence process is highly dependent on the quality and integrity of the underlying statistics. The compilation and reporting of statistics, particularly government finance statistics must not be subject to political considerations.

[10] This preliminary analysis for the North Macedonia's nominal convergence toward EMU, is done on a highly hypothetical basis, due to the fact that once the country on the first integration stage joins EU, on the second integration stage, it may intend to adopt the euro, whose national currency has followed a high volatility over several years.

[11]Article 140(1) of the Treaty on the Functioning of the European Union requires the Commission and the European Central Bank (ECB) to report to the Council, at least once every two years, or at the request of a Member State with a derogation (Denmark and United Kingdom), on the progress made by the Member States in fulfilling their obligations regarding the achievement of economic and monetary union (EU convergence report, 2018).

1. The fundamental criteria on price stability, which means the country has to achieve low inflation rate target, is the most important criteria which constraints the inflation rate of the pretending country toward EMU membership to not exceed by more than 1.5 percentage points that of, at most, the three best performing member states in terms of price stability.[12]
2. Uniformly low and stable long-term interest rate is the second criteria. An inflation-prone country could possible squeeze down inflation temporarily, on the last year before admission–for example, freezing regulated prices - only to relax the effort afterwards (Dauti and Herzog, 2008). In order to weed out cheaters, a second criterion requires that the long term interest rates must not exceed the average rates observed in the three lowest inflation rate countries by more than 2 percentage points. The economic rational is: Long-term interest rates reflect markets‟‟ assessment of long-term inflation (Dauti and Herzog, 2008).
3. A stable exchange rate, derived from uniformly low and stable inflation rates is the third criteria. The examination of exchange rate stability against the euro focuses on the exchange rate being close to the ERM II[13] central rate, while also taking into account factors that may have led to an appreciation (Dauti and Herzog, 2008). In particular, the Member State shall not have devalued its currency's bilateral central rate against the euro on its own initiative for at least the last two years before the examination[14] The relevant two-year period for assessing exchange rate stability in this report is 24 April 2016 to 23 April 2018 (EU convergence report, 2018)[15]
4. The ratio of the planed or actual government deficit to GDP, or the annual flow of public sector debt must not exceed the reference value of 3% of GDP value and the ratio of government debt to GDP, or the total stock of public sector debt, national debt, must not exceed the reference value of 60% of GDP value.

Moreover, there is an interesting link between the public finance criteria on fiscal deficit and public debt, regarding to real GDP growth (Dauti and Herzog, 2008). Article 140(1) also requires an examination of other factors relevant to economic integration and convergence. Those additional factors include the integration of markets, the development of the balance of payments on current account and the development of unit labor costs and other price indices (EU convergence report, 2018). The latter are covered within the assessment of price stability. The additional factors are important indicators that the integration of a Member State into the euro area would proceed without difficulties and broadens the view on sustainability of convergence.

[12]Inflation shall be measured by means of the consumer price index on a comparable basis, taking into account differences in national definitions. For the purpose of the criterion on price stability, inflation is measured by the Harmonized Index of Consumer Prices (HICP) defined in Council Regulation (EC) No 2494/95 (EU convergence report 2018)

[13]Entry into ERM II is decided upon request of a Member State by consensus of all ERM II participants. ERM II participants are the euro-area finance ministries, the ECB, non-euro area ERM II finance ministries and central banks (EU convergence report, 2018).

[14]In assessing compliance with the exchange rate criterion, the Commission examines whether the exchange rate has remained close to the ERM II central rate, while reasons for an appreciation may be taken into account, in accordance with the Common Statement on Acceding Countries and ERM2 by the Informal ECOFIN Council, Athens, 5 April 2003.

[15]In its assessment of the exchange rate stability criterion, the Commission takes into account developments in auxiliary indicators such as foreign reserve developments and short-term interest rates, as well as the role of policy measures, including foreign exchange interventions, and international financial assistance wherever relevant, in maintaining exchange rate stability.

Empirical assessment of the Maastricht Criteria[16]

Regarding the price stability criteria, during the whole period April 2007 – March 2018, North Macedonia, generally speaking had annual average inflation rate below the respective reference value on a periodical basis: April - March, with exception to the period April 2008-March 2009, where the country registered annual average inflation rate, above the reference value of 2.1 per cent, for 4.08 percentage points[17]. Looking back over the past ten years, inflation rate measured by CPI and PPI has been rather volatile, averaging 1.75 and 2.02 percent, respectively on annual basis, over the period 2008-2018 (Appendix: Table 3).

Regarding the exchange rate criteria, North Macedonia's currency does not participate in ERM2, but traded under fixed exchange rate regime. Overall, during the whole reference period, from April, 2008 to March, 2018, the Macedonia's national currency, Denar was not subject to significant depreciation or appreciation pressures, thus confirming the objective of the National Bank of the Republic of North Macedonia to maintain price stability. (Appendix: Table 5). The recorded insignificant appreciation/depreciation pressures of the national currency were lower than the tolerated exchange rate changes of 1.5 per cent, during the whole period (Appendix: row 2, Table 5).

As concern the convergence of long term interest rate, the long term interest rate on governmental securities is below the reference value during the whole referred period, with exception to the last period: April 2017-March 2018, where the long term interest rate in the country is higher for 0.22 percentage points than the reference value of 3.2 per cent (Appendix: Table 4)

With regard to the budgetary performance, North Macedonia has a fiscal deficit to GDP ratio below the convergence criteria of 3% specified in the treaty, during the period 2008-2011. During the observed period 2012-2017, the fiscal deficit to GDP ratio, on average, was higher than the reference value by 1.52 percentage points, whereas in 2018 the fiscal deficit in the country declined considerably below the reference value of 3 per cent. Concerning the country's public debt to GDP, the results are good, during the whole observed period 2008-2018 (Appendix: Table 6). However, in comparison to the allowed criteria of having external debt to GDP ratio, below 60%, the country recorded worrying results, especially from the year of 2011 to 2018, averaging 69.72 per cent of the external debt to GDP, which is 9.72 percentage points above the convergence criteria. However, to achieve a high degree of convergence, North Macedonia needs also to have good results in terms of GDP growth, substantial decrease of unemployment rates, low current account deficit and reasonable inward from FDI, which points to the need to ensure the sustainability of external position (Dauti and Herzog, 2008). With respect to external developments, North Macedonia recorded good result having regard the decreases on the deficits of balance of payment accounts (current account, capital account and financial account) and the increase of the presence of foreign capital in the country in the form of Foreign Direct Investments (the increase of FDI level in 2018 relative to the previous year is 9.54 per cent. Appendix; Table 7). With respect to real sector developments, significant improvements have been recorded having regard the average wage increase the last years, starting from 2016 onward, the improvements in labor productivity in 2018 relative to 2017 and previous years, as well as the increase of the industrial production. Regarding the data on GDP

[16]The results are shown on the appendix

[17]the inflation rate during this period was 2.56 percentage points above the tolerated limit for price increases of 1.5 percentage points (see row 2; table 3: 4.06-1.5)

per capita, one can conclude that North Macedonia's GDP per capita has registered a constant increase, representing good indicator of the level of Macedonia's standards of living, with the highest increase recorded in 2018 relative to the previous year by 12.28 percent, hence, announcing a good signal for speeding up the real convergence of the standard of living of North Macedonia's citizen's to the standard of living of EU citizens. The recorded growth of GDP by 2.7 per cent in 2018, on the demand side, was mainly financed by the increase of private consumption (contributing with 2.4 percentage points on growth increase, with a rise on employment, wages and households lending) and the increase of net exports (mainly FDI related, contributing with 1.7 percentage points on growth increase). The remaining 0.8 percentage points contribution on growth came from government consumption (World Bank, 2018). On the supply side, the growth was financed mainly by wholesale and retail trade, contributing with 2.3 percentage points on growth increase and manufacturing (production of busses, electric machinery, food and beverages, contributing with 0.6 pp on growth increase) (NBRM, 2018)

Conclusion and policy implications

The paper contributes on examining the convergence criteria for North Macedonia with a focus on nominal and real convergence, moreover, having regard the advancements the country made toward EU approximation, after setting up the North Macedonia's path toward EU membership, by the European Council in June 2018, where the possibility of starting the accession talks with the EU, during 2019 is potentially very high. The country made significant progress on meeting the EU convergence standards, with respect to nominal convergence (monetary and fiscal developments), and real convergence criteria (real sector developments). However, still many other important challenges to deal with remain open, like: improvements in the banking efficiency, fight against corruption, improvements in the rule of law, reduction of unemployment, especially giving a solution to the long-term unemployment problem, with special training programs and giving a productive direction to the scarcity of human capital. However, with respect to assessment of the nominal convergence criteria, it should be kept in mind that, for the case of North Macedonia, many tests are highly hypothetical, since the country is not member of the European Union and is far away from monetary integration into European Monetary Union, although the results provided in this paper can be used by policymakers as a milestone for future economic policy decisions in the country. For deeply empirical assessment of the convergence criteria related monetary integration of the country, suggestion for future research would be analyze the situation's how the North Macedonia's economy would operate under conditions of irrevocably fixed exchange rates.

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Appendix

Table 3. Price developments in North Macedonia

	Inflation indexes	April 2007 to March 2008	April 2008 to March 2009	April 2009 to March 2010	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	April 2015 to March 2016	April 2016to March 2017	April 2017 to March 2018
1	HICP inflation rate*	4.4	6.16	-0.7	2.39	3.39	3.29	2.07	-0.63	-0.06	-0.07	1.62
2=1-3	> 1.5 percentage points	1.2	4.06	-1.7	0.39	0.29	0.59	0.37	-1.83	-0.76	-1.37	-0.28
3	Ref value**	3.2	2.1	1.0	2.0	3.1	2.7	1.7	1.2	0.7	1.3	1.9
4	Euro Area***	2.5	1.4	0.3	0.5	0.8	2.2	1.0	0.6	0.1	0.7	1.4
5	Status of the Maastricht criteria****	F	NF	F	F	F	F	F	F	F	F	F

Note: * sourced from National Bank of the Republic of North Macedonia. Calculations made from the EU convergence reports on periodical basis April-March, for a time span, on a yearly basis: 2007-2018 **EU convergence reports on price developments; *** EUROSTAT; **** NF denotes not fulfillment of the Maastricht criteria. Negative value on row 2 denote that HICP inflation rate in North Macedonia is lower than the reference value, by the respective percentage points

Source: Authors calculations

Table 4. Long term interest rate in North Macedonia

		April 2007 to March 2008	April 2008 to March 2009	April 2009 to March 2010	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013	April 2013 to March 2014	April 2014 to March 2015	April 2015 to March 2016	April 2016to March 2017	April 2017 to March 2018
1	Long-term interest rates,*	3.9	4.0	4.25	4.51	5.5	5.00	4.66	4.04	4.00	3.87	3.42
2=1-3	>2.0 percentage points	-2.6	-2.2	-1.75	-1.39	-0.3	-1.0	-1.44	-2.16	-1.1	-0.13	0.22
3	Ref value**	6.5	6.2	6.0	5.9	5.8	6.0	6.1	6.2	5.1	4.0	3.2
5	Status of the Maastricht criteria****	F	F	F	F	F	F	F	F	F	F	NF

Note: * sourced from National Bank of the Republic of North Macedonia. Calculations made from the EU convergence reports on periodical basis April-March, for a time span, on a yearly basis: 2007-2018 **EU convergence reports on interest rate developments; *** EUROSTAT; **** NF denotes not fulfillment of the Maastricht criteria. * Long term interest rates on governmental securities (15 years);

Source: Authors calculation

Table 5. Exchange rate developments in North Macedonia

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Average exchange rate MKD/EU	61.27	61.27	61.51	61.53	61.53	61.58	61.62	61.61	61.60	61.57	61.51
percentage change; appreciation (-) / depreciation (+)*		0	0.39	0.03	0.00	0.08	0.06	-0.02	-0.02	-0.05	-0.10
Nominal effective exchange rate	89.0	93.8	92.7	93.6	93.7	95.0	97.7	99.9	102.6	103.4	106.2
Real effective exchange rate CPI	98.9	100.2	97.3	97.6	97.8	99.3	100.3	100.0	101.1	100.6	102.0
Real effective exchange rate PPI	91.8	92.1	93.2	97.9	98.8	100.0	101.4	100.0	103.0	100.1	97.8
Participation in ERM2	No	No	No	No	No	No	No	No	No	No	No

Notes: * percentage increase of the exchange rate (MKD/EU) relative to the previous year denotes depreciation of the national currency - denar, percentage decrease of the exchange rate (MKD/EU) relative to previous year denotes appreciation of national currency - denar.
Source: NBRM and authors calculations

Table 6. Fiscal sustainability developments in North Macedonia

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
General government deficit in per cent of GDP	-2.86	-2.90	-2.81	-2.99	-4.64	-4.90	-5.43	-4.59	-3.69	-3.87	-2.59
Reference value (Convergence Reports, 2008-2018)	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3
Status of the Maastricht criteria	F	F	F	F	NF	NF	NF	NF	NF	NF	F
Public debt as a % of GDP	16.39	19.58	20.04	27.32	28.51	26.66	33.25	32.34	35.68	34.57	34.99
Private debt as a % of GDP	16.39	19.58	20.04	27.32	28.51	26.66	33.25	32.34	35.68	34.57	34.99
Gross external debt as a % of GDP	48.79	55.87	57.76	64.24	68.18	64.05	69.98	69.34	74.73	73.62	73.66
Reference value	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
Status of the Maastricht criteria on public debt*	F	F	F	F	F	F	F	F	F	F	F

Source: National Bank of the Republic of North Macedonia (NBRM) and Authors calculations

Table 7. Relevant Macroeconomic indicators (Real sector and external sector)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
CPI (Consumer Price Index)	8.30	(0.80)	1.55	3.90	3.32	2.78	(0.28)	(0.29)	(0.25)	1.37	1.45
PPI (Producer Price Index)	10.12	-7.23	8.67	12.45	4.58	0.39	-1.16	-3.92	-0.23	0.82	-0.31
Growth rate of industrial production	5.10	-8.67	-4.84	6.93	-2.75	3.20	4.79	4.92	3.38	0.19	5.40
Labor productivity	-	-	-	-	-1.4	0.1	3.2	2.6	-0.3	-1.9	0.0
Average wage in denar	25,349	29,923	30,226	30,603	30,670	31,025	31,325	32,171	32,821	33,687	35,626
Nominal change	8.70	9.40	1.01	1.30	0.23	1.16	0.96	2.71	2.03	2.64	5.74
Real change	0.30	10.30	(0.60)	(2.50)	(2.98)	(1.58)	1.25	3.00	2.28	1.26	4.23
Current account in USD million	-1,235	-609.6	-198.3	-261.7	-319.1	-177.2	-71.6	-192.6	-309.8	-93.6	-46.4
Capital account	-15.4	15.5	4.5	-3.9	12.0	19.5	4.0	8.1	11.9	20.3	7.9
Financial account	-1,282	-553.7	-194.5	-250.7	-284.8	-137.7	-50.5	-187.0	-304.0	-85.2	-18.8
GDP growth rate (annual %)*	5.47	-0.36	3.36	2.34	-0.46	2.92	3.63	3.86	2.85	0.24	2.66
FDI inward stock in millions of dollars**	4,131	4,525	4,350	4,677	4,862	5,488	4,885	4,790	4,909	5,634	5,961
% change of FDI inward stock	9.54	(3.87)	7.52	3.96	12.88	(10.99)	(1.94)	2.48	14.77	5.80	9.54
GDP per capita, current and constant 2010 prices^	4,793	4,543	4,542	5,064	4,698	5,211	5,469	4,840	5,128	5,414	6,079
% change of GDP per capita		(5.20)	(0.02)	11.47	(7.21)	10.91	4.95	(11.50)	5.94	5.59	12.28

Source: NBRM; *sourced from World Bank; ** sourced from UNCTAD; ^sourced from UNCTAD