

Quantitative Country Analytics Briefings

Macedonia

16 July 2011

EXECUTIVE SUMMARY

- Although Macedonia has remarkably strong institutions with a demonstrated ability to enact robust policies, the country may find it difficult to adjust to negative external shocks and could work to further improve its medium-term growth prospects.
- Despite a stable external debt level, Macedonia's ability to withstand adverse external shocks has been weakened by its large short-term refinancing needs, consistent current account deficit and high energy intensity.
- Macedonia's institutions perform the best among the comparator countries in their ability to enact sustainable policies, as demonstrated by sustainable fiscal policies, low total indebtedness of the economy and a prudent banking sector. However, the country needs to catch up with its comparator countries in government effectiveness and political stability.
- Macedonia's medium-term growth potential is bolstered by established telecommunications infrastructure and a friendly business environment. Nonetheless, the country needs to address issues around employment/human resource potential and regulatory obstacles to construction and accessing credit.

MACEDONIA'S PERFORMANCE IN QUANTITATIVE COUNTRY ANALYTICS

We compare Macedonia against a benchmark of eleven comparator countries chosen from our analytical database of 174 countries. The countries are: Estonia, Serbia, Poland, Slovakia, Bulgaria, Moldova, Netherlands, Hungary, Cyprus, Georgia and Ireland. We also compare Macedonia against other Western Balkans: Albania, Bosnia and Herzegovina, Croatia, Montenegro, Serbia and Slovenia. It scores 5.7 out of a total possible score of 10, against a comparator average of 5.5 and the Western Balkans' average of 5.7. The breakdown into the three pillars reveals that Macedonia's weaknesses stem from moderately lower medium-term growth potential and substantially weaker external adjustment capacity, while institutional robustness is remarkably strong.

Note: All QCA scores in this briefing are based on the latest publicly available data, and mostly capture end-2010 or, if unavailable, 2009 data.

Table 1. Macedonia's QCA ranking

Versus	Macedonia
Overall QCA	4/12
Comparator group	
I: External Adjustment	8/12
II: Institutional Robustness	1/12
III: Med-term growth potential	9/12
All countries in QCA	
Overall QCA	93/174
I: External Adjustment	137/174
II: Institutional Robustness	16/174
III: Med-term growth potential	122/174

Figure 1. Overall QCA score, Macedonia and Comparators

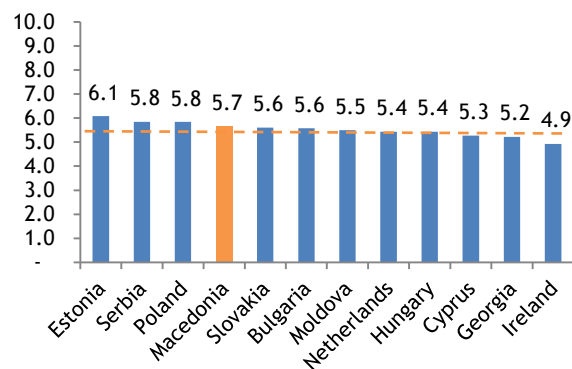
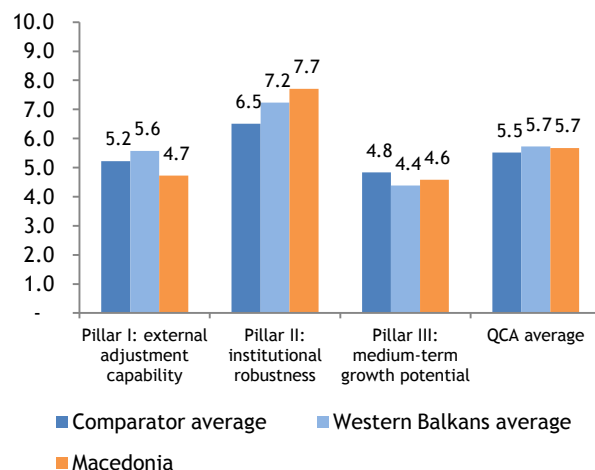


Figure 2. QCA by pillars, Macedonia and comparator average



External adjustment capacity

Macedonia has limited flexibility to adjust to external shocks due to a rigid exchange rate regime largely pegged to the euro and low productivity growth with real GDP seeing nearly-zero growth in 2009 and 2010. Although the current account deficit gradually declined from a peak of 13% GDP in 2008 to 4%¹ in 2010, it remains at a relatively high level and prevents sufficient foreign exchange reserves from accumulating to provide a buffer against future shocks. While Macedonia has foreign exchange reserve equivalent to five months of imports, they cover only 1.2 times short-term external debt, as compared to 3 times in Albania and 4 times in Serbia. In addition, half of the current account deficit is financed by portfolio investment which may less stable in a crisis than foreign direct investment. This, coupled with high short-term external debt, makes the economy more vulnerable to sharp capital outflows should investors lose confidence in its debt refinancing ability.

A sign of relief is that Macedonia has managed to stabilize its gross external debt at 50% GDP, as compared to 100% of Croatia and 120% of Slovenia. The country also has a relatively diversified export sector and is not highly reliant on volatile commodity exports. Nonetheless, Macedonia needs to continue improving its energy efficiency and transform its energy structure, which is heavily reliant on coal and imported oil. Primary energy consumption per dollar of GDP remains at 18,000 Btus in Macedonia, double the level of Hungary and triple the level of the Netherlands.

Despite a stable external debt level, Macedonia’s ability to withstand adverse external shocks has been weakened by its large short-term refinancing needs, consistent current account deficit and high energy intensity.

Figure 3. External adjustment capacity, Macedonia and comparators

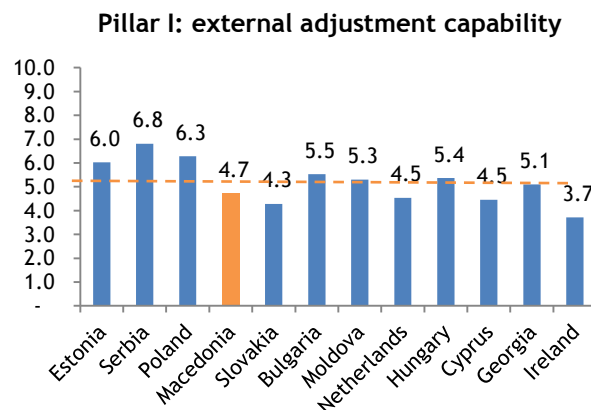
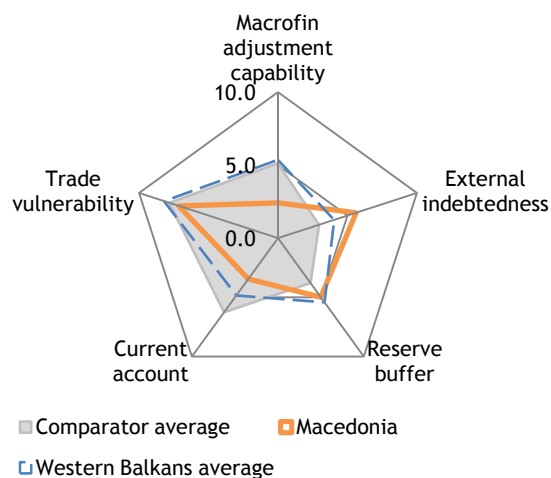


Figure 4. External adjustment capacity in detail, Macedonia and comparator average



¹ Projected by IMF Article IV, February 2011

Institutional robustness

Macedonia's institutions perform the best among the comparator countries in their ability to enact sustainable policies. The country, despite being a small and open economy with a pegged currency, has managed to contain inflation at a low single-digit level since 2010 after experiencing high inflation (8.3%) in 2008 and mild deflation (-0.8%) in 2009. Fiscal policy has been executed remarkably well, with gross government debt significantly reduced from 40% of GDP in 2006 to 26% in 2010 and the fiscal deficit sustained at less than 3% of GDP. This stands in sharp contrast to most Eurozone countries (Eurozone peripheries in particular) which are burdened with large government debt and chronically high fiscal deficits. Low government debt, coupled with low external borrowing by the private sector, contributes to a sustainable level of total debt in the economy which currently remains below 90% of GDP, as compared to over 200% of GDP in Hungary and Estonia. It should provide some support to the currency peg with the Euro in the near future.

The banking sector, which is a major source of economic vulnerability in many developed European countries, appears remarkably strong in Macedonia. Banks are well capitalized² and operating in a prudential fashion, as evidenced by limited cross-border bank borrowing and a healthy loan to deposit ratio less than 100%. Private sector credit extended by the domestic banks has been steadily growing at 6-8% per annum since the 2008 crisis. The banking sector has helped the country to weather the current crisis successfully and provides necessary financing to the private sector companies in the context of weakened external demand.

Nonetheless, it is worth noting that Macedonia performs worse than both the comparator average and the Western Balkans' average in measures of political stability and government effectiveness. The country is ranked at the bottom third out of 213 countries in Political Stability and Absence of Violence by the World Bank Worldwide Governance Indicators. Macedonia also needs to improve both the quality of public/civil service and the rule of law.

Macedonia's institutions perform the best among the comparator countries in their ability to enact sustainable policies, as demonstrated by sustainable fiscal policies, low total indebtedness of the economy and a prudent banking sector. However, the country needs to catch up with its comparator countries in government effectiveness and political stability.

Figure 5. Institutional robustness, Macedonia and comparators

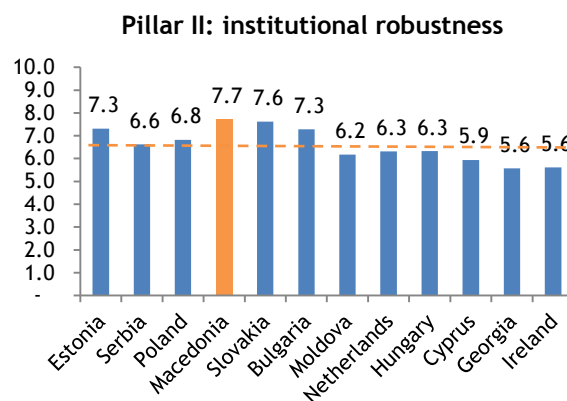
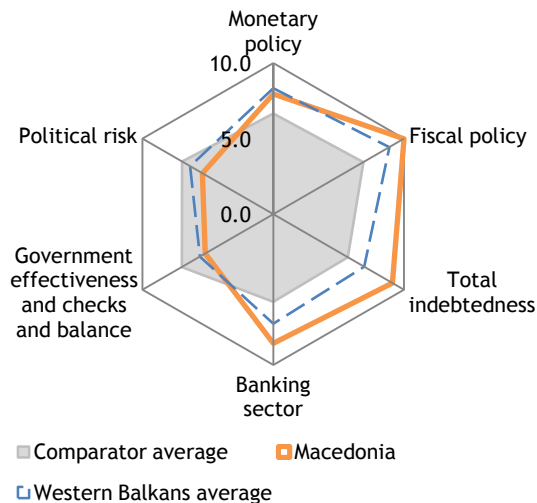


Figure 6. Institutional robustness in detail, Macedonia and comparator average



² The capital adequacy ratio (regulatory capital to risk-weighted assets) was 16% at the end of 2010.

Medium-term growth potential

Macedonia’s medium-term growth potential, adjusted for its level of development, appears largely in line with the comparator average and the Western Balkans’ average. A further breakdown highlights some areas of particular strength and areas for potential improvement.

Macedonia’s demographic structure is better than most of the other East European countries. Its pension-age population will be equivalent to 18% of the working-age population in five-year time, as compared to 22% in Poland and 27% in Hungary. However, the benefit of having a relatively large working-age population is more than offset by the country’s inability to create enough job opportunities for its people. A consistently high unemployment rate³ feeds back to people’s perception of the likelihood of finding jobs and results in a lower labour force participation rate, which may eventually lead to a shrinking employed workforce. This could reduce tax revenue, increase the burden of payment of pensions and unemployment benefits and hence increase the difficulty of maintaining a sustainable fiscal policy in the future. To address such problem, Macedonia could improve the skills of its workforce by, for instance, transforming its education system. While the country has done very well in providing secondary education to its youth population, it could step up more effort towards tertiary education and the education in maths and sciences, whose quality still lags behind that of other East European countries.

Macedonia’s innovation capability is bolstered by the wide usage of internet and the established telecommunications network, but significant weaknesses are revealed by the fact that the country generates a limited amount of high-tech exports and license fee receipts. One way to strengthen its innovation ability would be to enhance the collaboration between universities and industries. As regards infrastructure, the country needs to continue improving the quality of its transport infrastructure including roads and railways⁴.

While Macedonia, as an open economy, has created a friendly environment for starting business and trading internationally, it has significant obstacles to dealing with construction permits⁵ and getting credit without collateral⁶. The country could look to Georgia (7th out of 183 countries) and Cyprus (75th) for possible policies to streamline the construction application dealing process and to the Netherlands and Poland for setting up a better credit registry system.

Macedonia’s medium-term growth potential is bolstered by established telecommunications infrastructure and a friendly business environment. Still, the country needs to address the issues around employment/human resource potential and regulatory obstacles to construction and accessing credit.

Figure 7. Medium-term growth potential, Macedonia and comparators

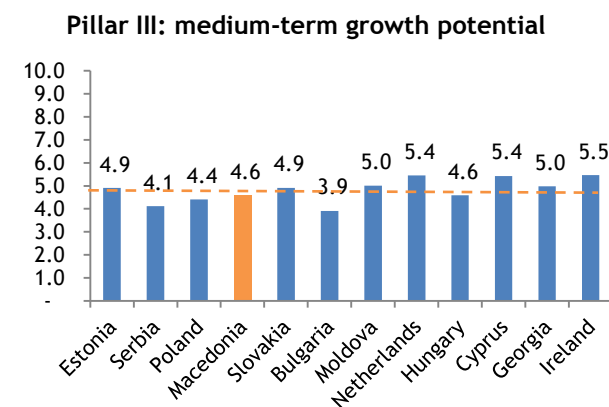
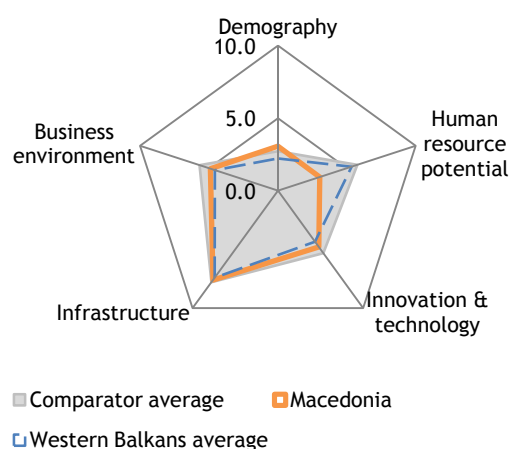


Figure 8. Medium-term growth potential in detail, Macedonia and comparator average



Note: When computing Pillar III average we adjust the score by GDP per capita, to address the fact that countries at a lower level of development will, other things being equal, have more room for catch up growth and hence higher growth rates in the medium term.

³ Official numbers point to an unemployment rate over 30%. IMF estimates that the rate declines to 20-25% -still a very high level- after the “grey economy” is considered.

⁴ Macedonia is scored 3.1 in Quality of roads and 2.1 in Quality of railway infrastructure in the World Economic Forum Global Competitiveness Report 2011-2012. The scores are scaled between 1 and 7, with 1 being the worst and 7 being the best.

⁵ Macedonia is ranked 136th out of 183 countries in the relevant index of World Bank Doing Business 2011

⁶ Macedonia is scored 2.1 in Ease of access to loans in the World Economic Forum Global Competitiveness Report 2011-2012. The scores are scaled between 1 and 7, with 1 being the worst and 7 being the best.

COUNTRY INSIGHTS AND QUANTITATIVE COUNTRY ANALYTICS

Our perspective

The established ways of analysing **country risk and growth fundamentals** have failed most market participants and risk takers over the last five years. Established analysis is often focused on a limited number of economic variables and therefore is unable to adequately assess the many complex interrelationships between economic fundamentals. As a result, such analysis is often too slow to capture rapidly changing **broad fundamentals** across a country's socio-economic structure. Country Insights developed its totally quantitative country analytical model, Quantitative Country Analytics (QCA), to address these issues.

What does our analysis focus on?

QCA answers three questions:

1. How much risk is a country exposed to?
2. How able is it to manage these risks?
3. What is the growth potential of the country?

It does this by analysing three fundamental aspects of the economy. These are:

1. How exposed is the economy to external shocks?
2. How strong are its institutions?
3. How adaptable is the economy, and how able is it to continue growing?

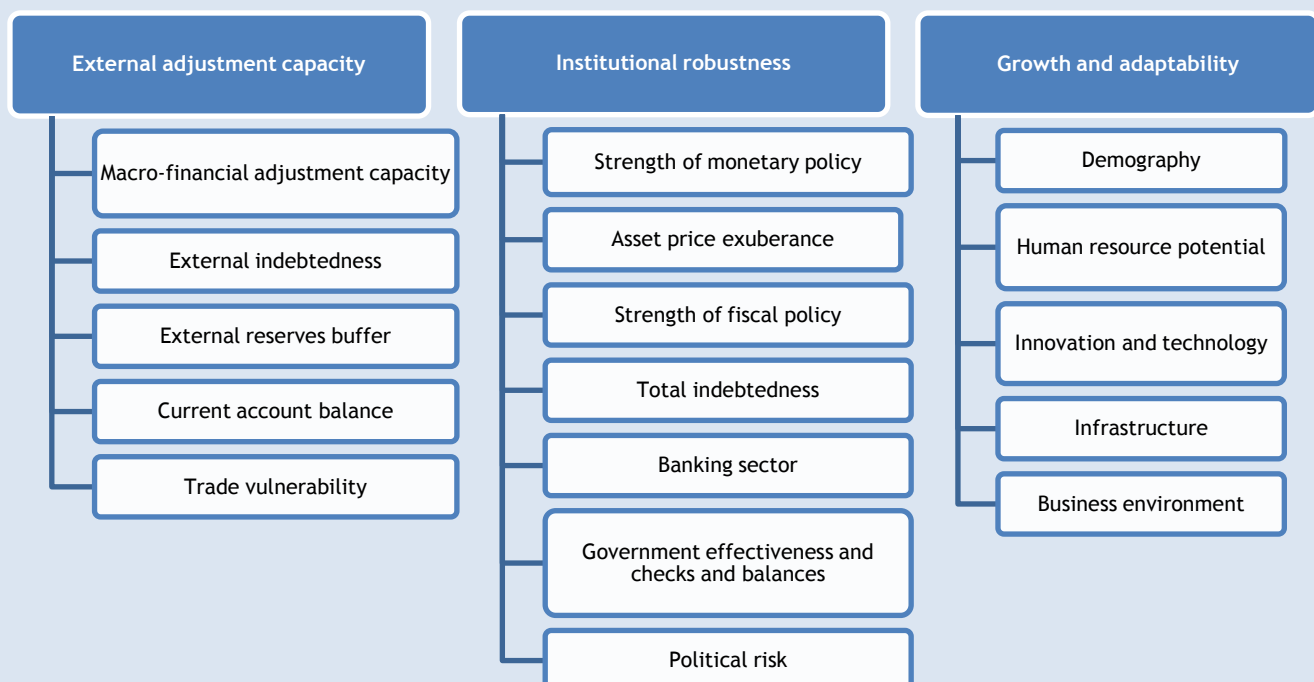
How is the analysis conducted?

Country Insights believes that analysis should be as objective as possible and always up to date with publically available data. QCA is a totally quantitative model that replicates the qualitative analysis of its architects, Max Watson and Paul Domjan, through a quantitatively-driven analytical scoring system. Its uniqueness is not the inputs themselves, but the way that they are scored.

Technical features

- In depth country analytical reports can be delivered in three working days
- Covers 174 countries in equal depth
- Recursive model that shows the impact of interactions between different parts of the economy (e.g. productivity growth, wage flexibility and the exchange rate system all impact on macro-financial adjustment capacity)
- Inputs updated quarterly
- Uses over 100 publically available data inputs per country. Cumulatively the model has over 1000 data inputs per country
- Methodology is reviewed every six months to capture new available data and seek improvements
- Produces one score that is supported by three pillars, 17 factors and 62 sub factors

QCA analysis is wide ranging, detailed and transparent



MACEDONIA: SELECTED ECONOMIC INDICATORS

	2008	2009	2010	2011
Real GDP growth (yoy, %)	5.0	-0.9	0.7	...
GDP at historic market prices (billions of US\$)	9	10	9	...
GDP per capita (thousands of US\$)	4.5	4.7	4.4	...
Consumer price inflation (yoy, %)	8.4	-0.8	1.5	4.0
FX reserves in months of imports	3.2	4.6	...	...
Short-term external debt to FX reserves (%)	79.2	83.0	...	...
Current account balance (% GDP)	-13.3	-6.6	-4.0	...
Current account balance plus net FDI ^a (% of GDP)	-6.9	-4.1	...	...
Top three exports (% of total exports)	...	49	...	...
Unemployment rate ^b (%)	34.0	33.0	32.2	...
Demographic burden (Pension-age population to employment, %)	40.3	38.4	...	...
Fiscal balance (% of GDP)	-0.9	-2.6	-2.5	...
Total indebtedness, estimate ^c (% of GDP)	80	81	84	...
International bank claims ^d (% of GDP)	16	18	18	...
- on public sector	2	2	2	...
- on non-bank private sector	13	15	14	...
- on banking sector	2	1	1	...
International debt securities (% of GDP)	4	6	6	6
- on public sector	...	...	6	6
- on non-bank private sector	...	...	...	...
- on banking sector	...	...	...	...
Gross government debt (% of GDP)	23	21	25	...
Banking sector capital adequacy ^e	16.2	16.4	16.5	...
Domestic private sector credit growth (yoy, %)	34.0	3.2	...	...
High-tech exports (% of total exports)	0	3	...	...

Source: JH&Co research, IMF, BIS, ILO, World Bank and World Economic Forum

- a. Reflects the extent to which the current account deficit is financed by portfolio investments as opposed to (less volatile) FDI.
- b. IMF World Economic Outlook estimate.
- c. International statistics sources do not report total indebtedness. JH&Co has constructed a consistent approach to estimating this across countries, by covering public, banking and non-bank private sector debt. The estimation is subject to error due to the possible overlap between components.
- d. BIS reporting banks.
- e. Bank regulatory capital to risk-weighted assets ratio (i.e. total capital adequacy ratio)

OUR HISTORY

Country Insights was spun-off in 2011 from John Howell and Co Ltd, an advisory firm focusing on financial and economic policy and regulation. Country Insights was established to capitalise on the success of Quantitative Country Analytics (QCA), the analytical model that drives our research and consulting.

JOHN HOWELL & CO. LTD.

Established in 1992, John Howell & Co Ltd is a strategic consultancy focusing on financial and economic policy and regulation. Our clients include sovereign wealth funds, private equity funds, major investment banks, hedge funds, asset managers, regulators, central banks and policy makers. Our projects include:

- country competitiveness strategies for national governments;
- macroeconomic advice to investment banks, hedge funds, and SWFs;
- regulatory advice and design of regulators and regulatory frameworks;
- specialist investment research;
- development of financial stability indicators for central banks; and
- developing and implementing country-level strategies to respond to economic crises.

We synthesise policy, regulatory, micro and macro economic and financial expertise, which gives us a unique understanding of the underpinnings of market performance.

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