Main Sources of Economic Statistics for Montenegro

Data in the Staff Report reflects information received by February 26, 2010.

In most cases, more recent data can be obtained directly from the following sources:

Statistical Office of Montenegro	http://www.monstat.cg.yu
Central Bank of Montenegro	http://www.cb-mn.org
Ministry of Finance of Montenegro	http://www.vlada.cg.yu/minfin
Montenegro Stock Exchange	http://www.montenegroberza.com
New Securities Exchange	http://www.nex.cg.yu
Institute for Strategic Studies and Prognoses	http://www.isspm.org
International Financial Statistics	

I. CONTEXT: A BRIEF HISTORY OF SHOCKS

1. **In its brief history since independence in 2006, Montenegro has been buffeted by strong, and sequentially opposing, external shocks**.

- **The post-independence boom, triggered by bold reforms and favorable assessments of the economy's potential, was nevertheless narrow-based and aggravated underlying vulnerabilities**. Very high levels of FDI and credit growth financed surging domestic demand and have raised average annual GDP growth to 8 percent since independence in 2006. FDI targeted primarily the tourism and financial sectors, triggering a cycle of wealth effects, as real estate became more valuable, was used as loan collateral, with loans in turn again funding construction activities. To the extent that FDI targeted other sectors it was either negligible or dependent on exceptionally favorable commodity prices and subsidies. As a result, imbalances have been created and vulnerabilities have increased: rapid credit growth has compromised the quality of banks' portfolios; real estate prices soared beyond fundamentals; private sector debt swelled; a large output gap has emerged; competitiveness has been eroded; and the current account deficit ballooned.

- **The sharp deterioration in the external environment post October 2008 triggered a severe contraction of economic activity**. While FDI remained buoyant, the burst of the global asset bubble in the fall of 2008 quickly affected Montenegrin assets and spilled over into stress in the banking system and difficulties in the corporate sector. The size and abruptness of the swing also left little time to redress the domestic vulnerabilities accumulated during the boom.

2. **Throughout the period, the policy framework has been challenged**. While euroization was very successful in anchoring expectations, it proved ill-suited for sterilizing massive capital inflows or checking the rapid credit growth, a situation that was further aggravated by a more expansionary monetary policy stance in the euro area than appropriate from Montenegro's cyclical perspective. Euroization also limits the scope for lender-of-last-resort (LoLR) operations, which is particularly relevant for domestic banks which lack foreign parent support. Prudential regulation has been strengthened but supervision lacked effective instruments and independence to intervene in banks. Finally, with the benefit of hindsight, it became clear that fiscal policy had been too loose, thereby leaving little fiscal space for countercyclical action in the event of a severe downturn.

3. **The authorities are maintaining the reform momentum.** Their overriding goal is to establish a business friendly, open economy with low taxes and minimal state interference and to integrate the country in Atlantic-European structures. Last year Montenegro applied for EU candidate status and recently submitted answers to the questionnaire on conformity with the *acquis communautaire*. Despite some delays in structural reforms and occasional difficulties in building consensus, the authorities remain pro-reform; early elections in 2009 provided the government with a significant parliamentary majority.

II. The Impact of the Post October 2008 Global Crisis

4. **Three main channels transmitted the global financial crisis**:

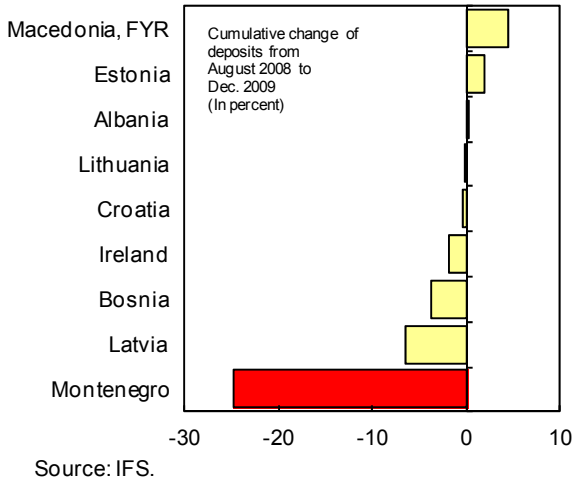
- **A credit crunch on the heels of contagion and concerns about the robustness of the banking system**. The initial driving force were massive and broad-based deposit withdrawals (Figure 1), much larger and more persistent than in neighboring countries, that have drained liquidity and tested the resilience of the banking system (Annex I). Apart from liquidity, loan quality also deteriorated as a large share of credit had gone to consumption and real estate—where collateral values have been correcting sharply and collateral execution is lengthy. Banks' efforts to clean up their loan portfolios and tighten credit risk management, and initial bank undercapitalization further reinforced the credit crunch. In the earlier stages, foreign parent banks (which own the bulk of the banking system) provided substantial liquidity support to their subsidiaries, mitigating the contraction of credit. But after deposits started reflowing in April 2009, they clawed back their earlier support, leaving bank credit on a declining path.

Counterparts to credit growth
(In percent of end-of last period's credit)

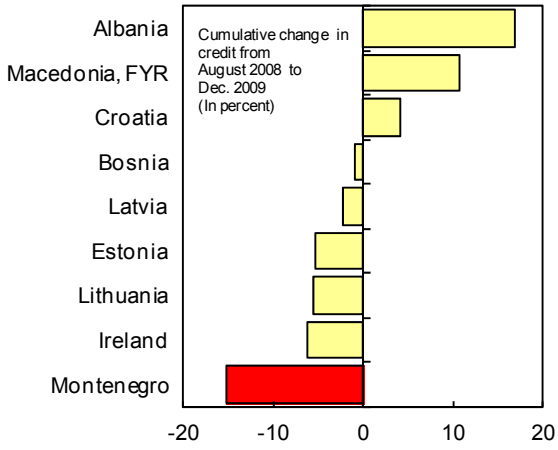
	2005	2006	2007	2008	2009
Bank lending	33	139	176	25	-15
Deposits	75	147	112	-11	-4
Net foreign liabilities	-25	22	55	26	-11
CBM	25	41	14	-4	-1
Bank capital	5	13	22	4	2

Sources: CBM and IMF staff estimates

Montenegro has been hit hard by deposit withdrawals and a credit crunch

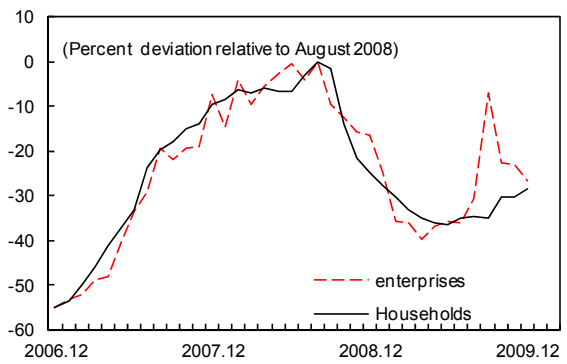


Source: IFS.

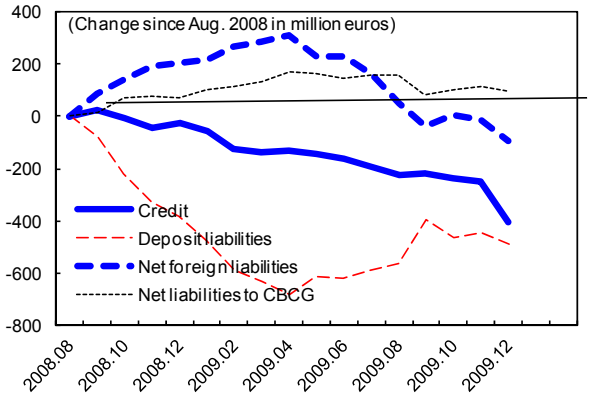


Source: IFS.

Notwithstanding a recent rebound, deposits remain below their 2008 level.

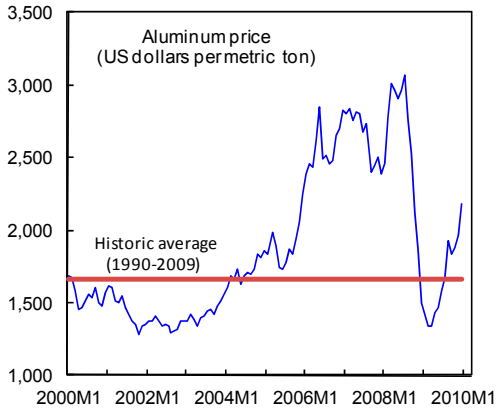


The tumbling of deposits has been mostly covered from foreign sources.



- **Depressed external and domestic demand with strong negative effects on economic activity.** Weaker interest by foreign investors for real estate in Montenegro and negative wealth effects—dropping asset prices, weaker balance sheets and reassessment of growth prospects—have triggered a sharp decline in construction activity (Figures 2–4). Moreover, in the important tourism sector, overnight visits declined, notwithstanding an actual small increase in the number of visitors and higher capacity having come on stream.

- **Large negative terms-of-trade shocks** have undermined the viability of the Aluminum Complex (KAP), the largest employer in the country, and the Steel Smelter. The drop of the aluminum price below KAP's break-even level has prompted severe production cuts, the built-up of arrears and NPLs, and reopened the public debate regarding KAP's medium-term viability.



Source: IFS.

- **These channels reinforced each other via feedback effects through the banking system**, as mounting arrears and NPLs further weakened banks and aggravated the credit crunch.

5. **Given the size of these shocks, but also reflecting Montenegro's initial vulnerabilities, economic performance weakened more than elsewhere in the region (Figure 5)**.

- **GDP dropped sharply** with the contraction particularly pronounced in industry, construction and financial services. From the demand side, the contraction of economic activity is evident in the drop of tax revenue (VAT and real estate taxes) and plummeting imports and exports (Figure 2). On the positive side, foreign investors remained attracted by Montenegro's potential. For the year as a whole, staff estimates GDP to have dropped by 7 percent, a 15 percentage point deceleration that has eliminated a large positive output gap (Annex II). The Ministry of Finance was slightly more optimistic, estimating the contraction at -5.3 percent, reflecting a more buoyant assessment of developments in the tourism and financial sectors.

GDP Growth by Sector, 2009–10

	2009	2010	2009	2010
	Ministry of Finance		Staff	
	(Percent changes at constant prices)			
Agriculture	2.5	5.2	3.0	4.0
Manufacturing and energy	-26.1	0.3	-7.5	3.3
Construction	-13.7	5.4	-28.0	-18.0
Trade	-9.7	3.4	-5.0	-3.0
Hotels	4.1	5.0	-2.0	1.0
Transport and communication	24.2	3.9	-2.0	1.5
Finance and real estate	0.6	0.6	-8.0	-7.7
Government services	2.8	-10.2	0.0	-3.0
Taxes-subsidies	-18.5	3.1	-12.0	1.0
GDP	-5.3	0.5	-7.0	-1.7

Sources: Ministry of Finance and Fund staff estimates.

- **A substantial deterioration in employment was masked by special factors**. Throughout much of 2009, headline employment and unemployment statistics depicted a strong labor market. However, this masked underemployment (especially in KAP), rising part-time employment and the substitution of domestic for foreign labor. In effective terms, employment is estimated to have dropped by 14 percent on an annual average basis; going forward, KAP restructuring could have a further significant negative impact on employment.

- **The downturn has eased the upward pressure on inflation and wages**. Although lags have kept year-on-year CPI inflation considerably above the euro area average, the differential has been narrowing. More importantly, nominal wages moderated and even declined during 2009—especially in sectors most affected by the downturn—helped by tax cuts that mitigated the effect on net wages.

6. **While the economic contraction is contributing to the restoration of internal and external balance, it also revealed the true extent of the underlying structural fiscal deficit**. Staff estimates that the GDP contraction in 2009 mostly eliminated the large positive output gap. The external current account deficit is projected to halve to some 27 percent of GDP, with the adjustment reflecting a larger drop of imports than exports. On the other hand, the import correction is revealing the structural fiscal revenue decline.

III. Outlook and Risks

7. **The economic contraction appears to be dissipating but there are scant signs of an imminent recovery**. 2010 is likely to be another challenging year in light of still unwinding imbalances, the planned downsizing and restructuring of the metal and mineral sector, and the fragile external environment (linked also to developments in Greece). Credit growth is likely to be very low given banks' reduced risk appetite, and ongoing restructuring, for example of the *Hypo Group Alpe Adria* (HGAA). Also, with a potential private-sector debt overhang, balance sheets are a drag on demand.[1] Finally, tourism and FDI are also likely to be held back in this environment. Staff projects GDP to register a small further contraction of some 1¾ percent, in the process opening up a small negative output gap and trimming inflation and wage growth. While the Central Bank broadly concurred with staff's assessment, the government was more sanguine, projecting growth of 0.5 percent.

8. **With the right policies, Montenegro's medium-term outlook should be bright**. Starting 2011, building on the progress in unwinding of imbalances and improving competitiveness, the economy could enjoy a more vigorous recovery and participate in the projected global upswing. Though still short of what was seen in the boom, staff and the authorities project medium-term growth to rebound on average to some 4 percent per annum. With savings recovering from their very low level, the current account deficit is projected to decline to 9 percent of GDP and inflation to hover around 3½ percent over the medium term.

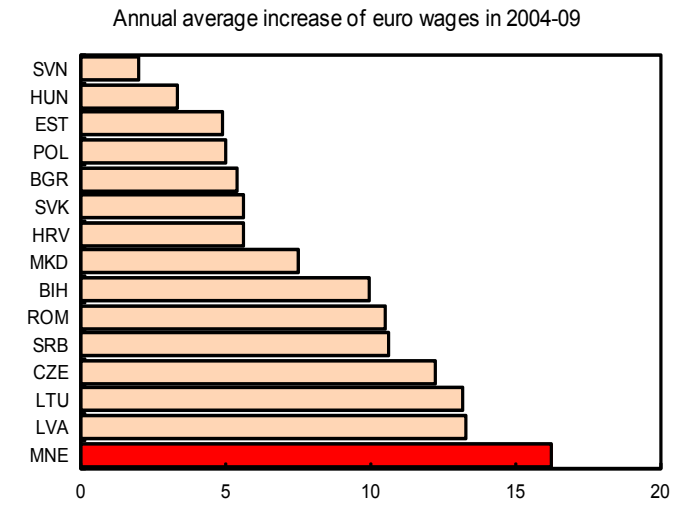
9. **This outlook is subject to considerable uncertainty, but the risks are broadly balanced**. The prospects for KAP's restructuring and its longer-term viability remain fluid; the financing for the large infrastructure projects could encounter problems; and a weakened financial sector, problems in parent banks, and impaired private sector balance sheets could prove a drag on the recovery. On the positive side there is foreign investors' interest in electricity generation and infrastructure projects, with substantial upside, reflecting Montenegro's untapped potential and small size. Even a handful of projects could turn around economic conditions very rapidly. However, staff stressed that this upside should not be taken for granted.

10. **While formal evidence on external competitiveness provides a mixed assessment, improvements are needed to bolster medium-term sustainability.** CGER-type estimates are highly uncertain (Box 1) and the large current account deficits reflect primarily an overheated economy and low savings,[2] while the relative resilience of tourism suggests that competitiveness may not be a problem for the time being. On the other hand, rapid wage growth—well above productivity—over the past few years is a concern, and the region as a

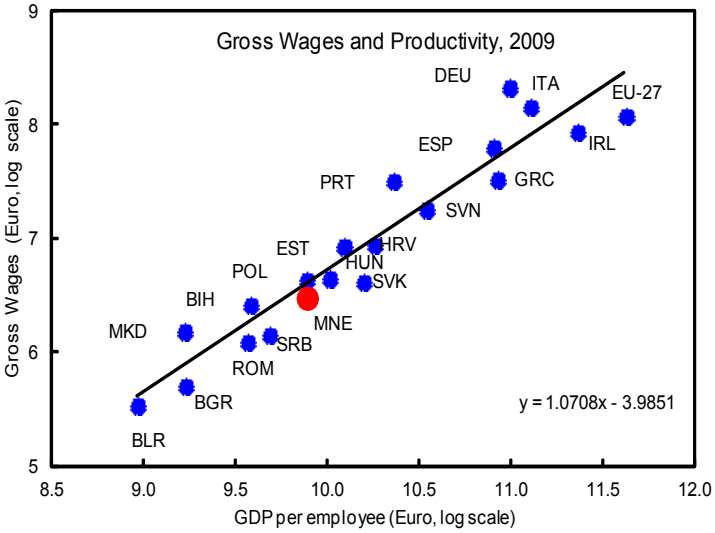
[1] The private sector carries some 60 percent of GDP of liabilities to foreign-owned banks. Recession and possibly deflation could aggravate the associated debt servicing burden.

[2] There is also circumstantial evidence that deficits may be biased upward from export under-recording, an issue MONSTAT has been looking into.

whole faces the task of rebuilding a competitive advantage going forward. Competitiveness gains will also allow the required further external adjustment to rely increasingly on export expansion and import substitution, rather than on outright domestic demand contraction, thereby also propelling a more healthy and balanced recovery as domestic demand growth is likely to play a less prominent role in future growth.



Sources: EuroStat; Haver; National statistical services, IMF staff estimates.



Sources: WEO; and IMF staff estimates.

Box 1. External Competitiveness

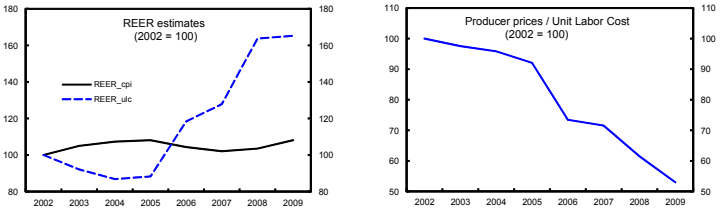
As in previous assessments, CGER-type methodology continues to provide divergent assessments and, on balance, does not find conclusive evidence of competitiveness problems. A weakness of the methodology is that it ignores external adjustment mechanisms that are important for Montenegro (the key role of FDI and domestic savings). In fact, the improvement of the external current account in 2009 does not stem from competitiveness gains, but rather from import contraction. In addition, the estimated equilibrium balance in the macrobalance and external stability approaches should be taken only as a rough guide; the former is based on a regression that includes a regional dummy that raises the equilibrium estimate, which may not be robust, while the latter assumes debt stabilization at the current level of almost 100 percent of GDP, arguably a too high level.

Current Account Balance Gap and Real Exchange Rate Overvaluation
in Macrobalances and External Sustainability Approaches
(in percent of GDP, unless otherwise specified)

	Macrobalance Approach	External Sustainability Approach
Equilibrium balance A	-7.0 [1/]	-12.2 [2/]
Underlying balance B [3/]	-9.0	-9.0
Gap = A-B	**2.0**	**-3.2**
Mitigating factor **C**: capital transfers	0.0	0.0
Gap net of mitigating factors = A-B-C	**2.0**	**-3.2**
Implied misalignment, in percent (+: overvaluation) [4/]	10.5	-16.7

Source: IMF staff estimates.
1/ Rahman (2008).
2/ Consistent with FDI of 5 percent of GDP.
3/ Adjusted for transitory elements in savings and investment.
4/ Calculation based on elasticities reported in Isard and Faruqee (1998).

Unit Labor Cost data indicate an erosion of competitiveness, but the level does not seem to be clearly out of line within the region (taking into consideration the poor data quality). However, the region itself faces the task to rebuild its competitiveness in the years ahead. On a more optimistic note, the unfinished reform agenda suggests a large potential for productivity gains.



Sources: Monstat, Satistical Offices ot trading partners, and Fund staff calculations.

Finally, the tourism sector has managed to improve its competitiveness ranking across the board and especially in the area of price competitiveness, though the expected further adjustment in regional competitors will make continued gains essential.

Competitiveness rankings in tourism have improved across the board

	Overall ranking		Regulatory framework		Business environment and infrastructure		Human, cultural, and natural resources		Price competitiveness	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
Spain	5	6	28	29	5	8	4	5	88	96
Cyprus	24	21	27	25	17	13	40	37	95	82
Greece	22	24	17	18	30	27	18	27	120	114
Italy	28	28	41	46	24	26	15	22	124	130
Malta	25	29	13	11	25	31	43	52	100	122
Croatia	34	34	39	43	38	37	32	43	108	103
Slovenia	36	35	42	38	33	33	61	61	102	94
Slovakia	38	46	33	34	46	54	51	55	84	88
Bulgaria	43	50	50	56	52	48	31	46	69	73
Montenegro	**59**	**52**	**53**	**50**	**68**	**66**	**45**	**35**	**129**	**95**
Turkey	54	56	56	63	57	60	44	44	103	109
Romania	69	66	72	61	66	64	73	77	109	110
Serbia	78	88	73	78	72	80	88	96	82	90
Albania	92	90	81	77	105	104	71	66	90	84

Source: World Economic Forum.

IV. Report on the Policy Discussions

11. **Apart from the immediate task to secure a fast economic turnaround, discussions centered on ways to strengthen the economy's resilience to external shocks.** A small and highly open economy like Montenegro is inherently more exposed to global ups and downs. The policy framework therefore needs to allow for sufficient buffers to mitigate the domestic fallout from global shocks. Euroization, while anchoring expectations, poses greater demands on fiscal policy which is de facto the only tool for macroeconomic management and also needs to substitute for the absence of a LoLR. In order not to overload the fiscal policy tool, a high degree of flexibility in the economy is imperative, as is a proactive and effective banking sector policy.

12. **Against this background, a comprehensive strengthening of the strained policy framework was discussed**. The structural fiscal deficit is undermining the ability to raise financing and has left little space for counter-cyclical fiscal policy. Problems in the young banking system have been testing the capacity of bank supervision and have exposed critical weaknesses in relevant legislation. Meanwhile, the flexibility of labor and product markets could be further improved, as evidenced by the drawn-out restructuring in the mineral sector.

13. **The authorities' program would need to combine adjustment with additional external financing.** But the authorities have not yet decided on the possibility of using Fund resources. They are exploring a number of financing options, including a debut Eurobond.

A. Stabilizing and Rebuilding the Financial Sector

14. **Stabilizing the banking system will be necessary to restart the flow of credit**. Overextended bank balance sheets have amplified the impact of the international financial turmoil. Indeed , the credit crunch—reflecting the broad-based deposit withdrawals, rising NPLs, difficulties in recapitalizing encountered by owners, and subsequent efforts to shed credit risk—has dwarfed the fiscal contraction and is still ongoing, posing the largest near-term risk to an economic recovery.

The credit shock has dwarfed the fiscal shock
(Changes in percent of GDP)

	2006	2007	2008	2009
Credit expansion	21.1	51.2	17.2	-13.7
o/w funded with:				
Deposit growth	22.2	32.6	-7.7	-3.6
Net foreign liabilities	3.4	15.9	17.8	-10.0
Fiscal impulse [1/]	1.6	-1.7	3.2	0.1

Sources: CBCG; and IMF staff estimates.

1/ The fiscal impulse is based on the augmented methodology of calculating the structural balance. See Annex III.

15. **The authorities pointed to their prompt response to the financial turmoil.** To bolster confidence, the government announced a blanket deposit guarantee; provided emergency support (€44 million, repaid by October 2009) and subsequently steered privatization-related deposits to *Prva*, the largest domestic bank; and also prepaid loans in an effort to boost bank liquidity. The Central Bank (CBCG) meanwhile reduced required reserves to 10 percent. Foreign parents have also stepped in with substantial liquidity

infusions to their subsidiaries while the CBCG pressed effectively for capital injections (more than €100 million have been raised since the outbreak of the crisis) and stepped up its surveillance, including mandating diagnostic audits and stress tests for all banks. At the same time, loan classification rules were relaxed and in *Prva*, where the problems were diagnosed to run deeper, the CBCG has prohibited new lending, demanded the installation of new management and commissioned an independent external audit. Finally, work on implementing FSAP recommendations continued apace.

Implementation of FSAP Recommendations

Measure in Action Plan	Status of Implementation
Change in organizational structure of CBM Increased specialization Integration of on- and off-site supervision Development of portfolio management	Implementation of the reorganization is progressing, including more targeted supervision, close cooperation between on- and off-site supervision, and stepped up portfolio management.
Supervision Development Plan	Updated annually on a rolling basis.
Improve control of credit, liquidity, FX and operational risks	New regulations have been issued (most recently on operational risks in 2009) and are being implemented. Liquidity is tracked on a daily basis.
Consolidated supervision	Consolidated supervision is being implemented, including reporting requirements.
Banking Law and Central Bank Law	Both laws are in the final stages of being finalized and passed by parliament.
Measures to address bank specific vulnerabilities	Banking supervision is becoming increasingly tailor made, and advice and demands are specific to banks, reflecting the risk profile, management, and other factors.
Credit registry Broaden access to information by banks Charge fee to access information. Include additional information in line with Basel II.	The registry is fully operational, accessed by banks for a fee, while a broadening of the information base is still in the planning phase.

16. **There was agreement that the fluid and complex situation required continued vigilance.** Staff suggested that a sustainable resumption of financial intermediation required actions on a wide front:

- **Stepped-up supervision**; Lagged effects from ongoing asset price corrections and the economic downturn would likely further weaken banks' portfolios and profitability. Staff underscored that banks needed to strengthen their risk management capabilities and urged CBCG to continue to monitor closely loan classification and provisioning as well as the implementation of recent counter-cyclical regulatory changes. Existing central bank interventions in weaker banks would need to remain in force and be tightened as appropriate. Finally, the newly established Investment Development Fund should be prudent in its operations and brought under Central Bank supervision.

- **Legislative action**; The authorities, with Bank-Fund assistance, are well advanced in the process of amending the Law on Banks, Law on Bank Bankruptcy and the Central Bank Law. The objective is to, inter alia, improve the effectiveness of interim bank administration and ensure that the judicial review process does not unduly constrain the effectiveness of the CBCG. The authorities explained, however, that ensuring consistency of the amendments with Montenegro's legal traditions and constitution had been a challenge. Staff welcomed the preparation of new deposit insurance

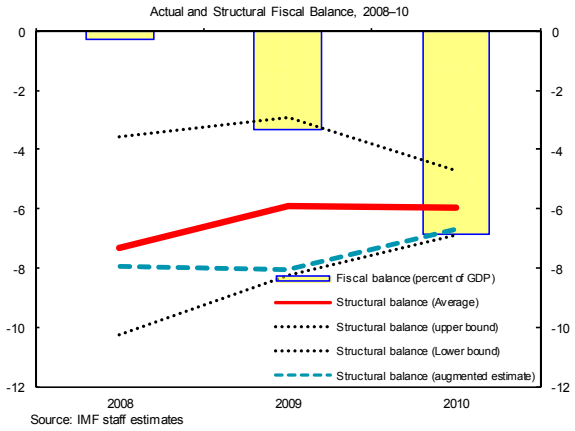
legislation but cautioned that coverage should remain affordable. Staff also welcomed the issuance of supporting guidelines for the new AML/CFT law, noting that no serious cases had been reported.

- **Replacing temporary fixes**; For example, the placement of public sector deposits with the largest domestic bank would need to be followed with more permanent solutions to safeguard financial stability while limiting fiscal risks.

- **Support by shareholders and foreign parent banks**; the situation surrounding *HGAA*—the third largest bank—imparts some uncertainty, while the largest—also foreign-owned—bank is working out a weak loan portfolio. Staff advocated continued support from parents and supported the CBCG's efforts to encourage banks to raise capital cushions well above the minimum requirements, also with a view to bolster confidence.

B. Regaining Fiscal Policy Buffers

17. **The large structural deficit that expanded during the boom is a key vulnerability and limits room of maneuver**. Staff estimates the structural deficit at some 6 percent of GDP (Annex III), reflecting discretionary tax cuts and expenditure increases during the boom years. The subsequent crisis and initiation of deleveraging and balance sheet repairs drove revenue to a lower permanent base, narrowing the gap between the actual and structural deficits. The authorities, being more optimistic on the buoyancy of demand and increasing tax compliance, considered the general government position to be structurally balanced.



Source: IMF staff estimates

18. **The authorities pointed to their swift fiscal adjustment in 2009.** In the fall of 2008, a stimulus package, consisting of bank support and increased public investment, was launched. Accordingly, the 2009 budget projected continued vigorous growth. However, as the full extent of the global crisis became evident and revenues plummeted, the government quickly reversed course with a view to containing budget financing requirements. A mid-year revision of the state budget and similar adjustments at the local level ordered large cuts in capital expenditure, goods and services and the wage bill (of 33, 13 and 8 percent, respectively), resulting in an overall 4.5 percent decline in expenditure. The 2009 general government cash deficit was thus limited to an estimated 3.2 percent of GDP, bringing the accrual deficit to 4.3 percent owing to expenditure arrears. While public debt rose more—to 38.8 percent of GDP from 29 percent in the prior year—the increase reflected the assumption of 3 percent of GDP in state enterprise debt and some pre-financing of the 2010 deficit.

Main Discretionary Fiscal Measures in 2009–10
(Budgetary impact: + denotes improvement)

	2009	2010
	(Percent of GDP)	
Main tax measures:	-0.9	0.2
Decrease of PIT rate in two steps to 9 percent	-1.0	-1.0
Decrease on contribution rates	-0.6	0.0
Increase of contribution rates	0.0	0.5
Increase of excise tax on cigaretes and oil	0.7	0.3
Elimination of tax exemptions	0.0	0.3
Main expenditure measures:[1/]	5.4	-0.2
Restraint in capital expenditures	4.6	0.0
Restraint in goods and services	0.7	0.0
Restraint on wage bill	0.9	0.0
Application of new contributions rates	0.0	0.5
Project "Job for you"	-0.6	0.0
Social program for KAP restructuring	-0.1	-0.7
Total impact on budget:	4.5	0.0

Sources: Ministry of Finance; and IMF staff estimates.
1/ The impact of measures in 2009 is calculated as the difference between the original and revised budget.

General Government, 2008–10

	2008	2009		2010
	Exec.	Budget	Exec.	Budget
	(In percent of GDP)			
Revenues and Grants	48.6	56.2	43.2	45.3
Expenditures and Net Lending	48.8	56.7	46.4	49.0
Wage bill	12.1	12.8	11.9	13.0
Goods and Services	6.4	6.8	5.8	7.3
Social transfers	11.4	14.0	13.2	13.9
Investment	10.1	13.9	8.6	7.9
Other expenditures	7.1	8.5	8.1	7.1
Net lending	1.8	0.7	-1.2	-0.1
Arrears	0.0	0.0	1.0	0.0
Fiscal balance	-0.3	-0.5	-4.3	-3.7

Sources: Authorities; and IMF staff estimates.

19. **While welcoming the recent budget adjustments, staff nevertheless cautioned that the clouded fiscal outlook and heightened risks called for further and sustained action**. Staff welcomed the 2010 budget's focus on current expenditure control but noted that its weaker macroeconomic projection would widen the general government deficit further to 7 percent of GDP. Moreover, on current policies, the deficit would remain elevated over the coming years, leading to a further increase of public debt, which is projected to peak at 56 percent of GDP in 2014. There was additional risk to debt dynamics from contingent liabilities (Annex IV). These derived from uncertain but sizeable restitution obligations, accelerating aging-related unfunded liabilities, and recently stepped up loan guarantees. Moreover, the elevated private sector debt burden poses fiscal risks, for example in the context of future enterprise restructuring and potential budgetary obligations from safeguarding financial stability. There is also risk that budgetary financing might be difficult to obtain in the currently tense external financial environment. With the privatization program already fairly advanced, future divestiture proceeds should offer only a partial relief.

Optimistic Assumptions Underpin the 2009 and 2010 Budgets

	2009		2010	
	Budget	Est.	Budget	Staff proj.
Nominal GDP, percent change	14.5	-3.7	3.8	-0.2
Revenues, percent change	10.4	-15.2	0.0	-3.6
Expenditure, percent change	9.1	-3.4	0.5	2.4
Fiscal balance, percent of GDP	-0.5	-3.2	-3.7	-7.1

Sources: Ministry of Finance; IMF staff estimates.

Medium-Term Fiscal Projections

	Authorities' baseline				*Fund staff projection*			
	2010	2011	2012	2013	2010	2011	2012	2013
General Government Balance (percent of GDP)	-4.3	-1.5	0.0	1.0	-7.1	-7.6	-5.6	-4.4
General Government Debt (percent of GDP)	39.5	38.7	34.2	30.5	44.0	49.2	51.9	53.8
Real GDP (percent change)	0.5	3.0	4.0	4.0	-1.7	4.6	5.5	5.0

Sources: Ministry of Finance; IMF staff projections.

20. **There was agreement on the needed medium-term consolidation path but staff noted that the required policies remain to be articulated.** The authorities intend to eliminate the headline fiscal deficit by 2012, an objective endorsed by staff, with both sides noting the political economy difficulties. While welcoming the authorities' intention to undergo a comprehensive review of public expenditure with a view of "doing more with less," with World Bank assistance, staff noted:

- **Fundamentally, the sizeable structural fiscal deficit reflects an inconsistency between low tax rates and the large size of the public sector.** VAT and especially income tax rates, at 17 and 9 percent, respectively, are low by international standards, whereas government expenditure, at 48 percent of GDP, is above average for an

emerging market economy (Figure 6). Staff noted that given the low base, small tax increases should not undermine Montenegro's competitiveness and may even raise its attractiveness as a business location if concerns about the sustainability of the tax regime are removed. In turn, the authorities expected that past tax cuts generated supply-side effects and reduced tax evasion, thereby helping both economic activity and public finances.

- **The social transfer system imposes a heavy burden on the budget and on cost competitiveness.** The authorities observed that in contrast to income tax rates, social contribution rates were quite elevated, and had recently been raised further. Staff noted that this reflected a high transfer dependency ratio of some 60 percent and that large unfunded future pension liabilities aggravated the imbalance.[3] In addition to the fiscal burden, such a high ratio distorted incentives to work and posed an obstacle to improving cost competitiveness. Reform of entitlement programs, especially pension and disability insurance, could redress the problem while still protecting the neediest in society.

PIT was cut but employee contributions raised

	2009	2010
Personal Income Tax	12.0	9.0
Health insurance	10.5	12.3
Pension insurance	20.5	20.5
Unemployment insurance	1.0	1.0
Total social insurance	32.0	33.8
o/w paid by employee	*17.5*	*24.0*

Source: Ministry of Finance

- **Sizeable "below-the-line" operations aggravate the financing constraint**. Regular and early repayment of frozen foreign currency deposits, restitution payments, and settlement of arrears all serve to increase financing needs. In order to lessen such needs, staff advised against further debt prepayments and buybacks and encouraged reconsideration of the generous restitution scheme. Concerning the latter, the current pace of disbursements could well exhaust the legal limit of 10 percent of GDP. This could create inequities as claimants whose claims still have to be ruled upon may have to go without any compensation for lack of funds. Staff also advocated strict control of loan guarantees and of the Investment and Development Fund.

- **The wage bill is high by international standards**, reflecting above average public employment (Figure 7). Rationalizing public employment could also make room for meeting EU requirements for institution building, while wage adjustment could well set an example for the private sector that needs to bolster competitiveness.

- **A longer-term fiscal rule could help adjustment and credibility.** The authorities saw merit in a "Golden Rule" whereby the capital budget exceeded the headline deficit and structural revenue covered current spending. Staff in turn underscored that the effectiveness of fiscal policy in a euroized environment required low debt. Staff also reiterated past advice to adopt a net-debt anchor, in particular noting the

[3] The transfer dependency ratio measures the share of benefit recipients to total employment.

undesirable current situation where policy buffers needed to be rebuilt in a downturn, thus placing further drag on economic recovery. However, because of the uncertain and potential large contingent liabilities and potential bank restructuring outlays, staff concurred with the authorities that setting a specific debt target would in practice be difficult. Staff also welcomed the authorities' approach of embedding annual budgets within rolling three-year budgets. Staff advised that these budgets should be based on conservative projections because of the considerable uncertainty surrounding the macroeconomic framework and asymmetric costs of fiscal over- and underperformance. Staff also recommended better integration of central and local government budgets and close monitoring of contingent liabilities and guarantees.

C. Structural Reforms—the Key for Boosting Competitiveness

21. **Staff noted that structural reforms had to be ambitious to substitute for the lack of the exchange rate instrument**. Given the pressures for nominal convergence for prices and wages, the flexibility of labor and product markets and the adaptability of the institutional framework will be essential for safeguarding external competitiveness and for mitigating the adverse effects of shocks. While agreeing with the authorities that Montenegro fared relatively well in international comparisons of market flexibility and openness, staff noted that there was an unfinished agenda.

- **Additional labor market flexibility**. With just one year since its enactment, it is early to draw definitive conclusions about the new labor law. The authorities found the experience so far positive but agreed that opt-out clauses from the collective bargaining agreement, or at least a separate one for the public sector, would benefit labor market flexibility and public sector reform. Staff observed that severance remained expensive, discouraging job creation and longer-term employment contracts, and welcomed the shortening of the unemployment benefits period.

- **Building on recent progress in the electricity sector**. The unbundling of generation and distribution has been completed, the electricity utility's (EPCG) capital increased, and the state has effectively transferred 40 percent of EPCG to a strategic foreign investor (with the latter having an option to raise its holding to a majority stake). The authorities have also started granting licenses for electricity production with renewable sources of energy and are exploring options for greater integration into the European electricity grid. Staff welcomed steps to reduce cross subsidization of electricity prices and the replacement of remaining cross-subsidies with direct budget subsidies.

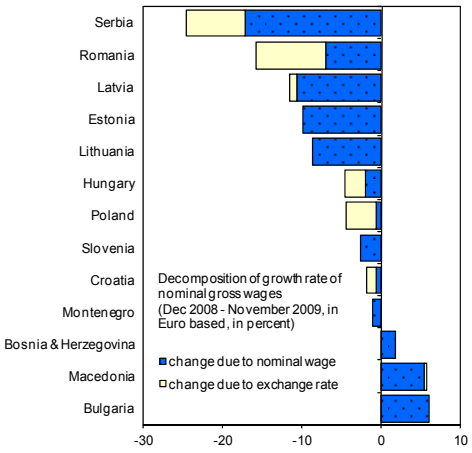
Box 2. How Flexible are Nominal Wages in Montenegro?

In 2009, nominal gross wages declined in sectors strongly affected by the downturn. The very high growth of wages in the preceding period suggests that the correction of wages may take some more time. In fact, several neighboring economies with pegged exchange rates and at a more advanced stage in the business cycle have registered larger nominal wage drops than in Montenegro. In economies with more flexible exchange rate arrangements, the benefit of the wage declines on competitiveness has been reinforced by exchange rate depreciations.

Gross Wage Increases by Sectors
(percentage change)

	2007-2008	Dec 2008-Dec 2009
Economy wide	22.8	0.3
Sectors		
Health and social care	34.9	5.4
Public administration	32.1	-5.6
Education	31.6	4.7
Agriculture	30.4	2.5
Construction	22.4	-0.5
Real estate	21.8	-9.9
Electricity	16.4	7.3
Industry	16.3	-3.5
Trade	15.0	-4.1
Mining	15.0	4.1
Transportation	14.9	6.5
Tourism	14.2	-8.5
Financial intermediation	10.6	-4.7

Source: Statistical Office of Montenegro



Source: National Statistic Services

- **Tackling the mining and minerals sector**. A recent agreement between KAP's owners and the government aims to address serious debt and overstaffing problems to help the company return to profitability. It comprises a social package (mainly incentivized voluntary early retirement) for cutting employment by half, an electricity subsidy (negatively related with the aluminum price) and state guarantees for old and new bank credits. Staff welcomed the commitment to transparently account for all subsidies and guarantees in the budget. However, given the magnitude of the subsidy (¾–1 percent of GDP) and the large fiscal risks (4½ percent of GDP) from state guarantees, staff has urged the authorities to carefully assess KAP's longer-term viability and the costs/benefits of continued subsidization.

- **Cutting red tape, particularly at the municipal level**. The authorities explained that despite progress, infrastructure bottlenecks remained an issue, especially in the area of transportation, water supply and waste management. Significant progress had also been made in finalizing land use regulations at the municipal level. Staff welcomed plans to set up a Council for the Elimination of Business Barriers and address red-tape issues in the law on foreign investment, and also encouraged the authorities to continue with their efforts to redress perceived weaknesses in corruption, building on Montenegro's favorable international ranking in relevant surveys. Progress in Montenegro's EU candidacy will also be important.

22. **There was agreement that a regular and transparent flow of high quality macroeconomic information is a prerequisite for policy-making, transparency, accountability, and informed public debate on economic policy**. Areas for future action include (i) national accounts statistics (currently incomplete and released only with long delays); (ii) expenditure deflators and quarterly national accounts (currently unavailable); (iii) international trade statistics (where exports may be systematically under-recorded); (iv) the compilation of IIP statistics; and (v) making more detailed high-frequency information on the budget publicly available.

V. Staff Appraisal

23. **With the right policies in place, the economy of Montenegro should be able to recover from the sharp recession in 2009.** In 2010, imbalances are expected to continue to unwind and in the context of a still fragile external environment, GDP is projected to contract again (by a more modest 2 percent). But with good policies, growth should rebound in 2011 and could average some 4 percent in the medium term. However, while there is a substantial upside from Montenegro's large untapped growth potential, it cannot be taken for granted.

24. **The immediate policy challenge is to manage the still needed balance sheet corrections**. In addition, sustained efforts are required to further strengthen the banking system, to make public finances more sustainable, and to undertake growth-enhancing structural reforms, especially in the labor and product markets.

25. **Domestic savings need to increase and competitiveness must improve**. Higher savings, from both the government and from the private sector, are needed to cut the current account deficit to sustainable levels. While the adjustment has already begun, it needs to be supplemented by export expansion and import substitution. Improved competitiveness will be crucial if Montenegro is to take advantage of the projected global recovery. With euroization precluding adjustment of the nominal exchange rate, competitiveness gains depend upon cutting costs and raising productivity.

26. **The financial sector must remain subject to close and effective supervision.** A sustainable resumption of financial intermediation calls for large capital buffers and a more effective framework to swiftly deal with problem banks in distress. The authorities have acted promptly to tackle problems in the banking system. Yet their effectiveness would be further strengthened by the expeditious adoption of new legislation on banks and bankruptcy in accordance with international best practice, and a revised Central Bank Law. Existing central bank interventions in weaker banks need to remain in force and be tightened as appropriate, while the implementation of recent counter-cyclical regulatory changes needs to be carefully monitored and kept under constant review. The Investment Development Fund should be prudent in expanding its operations and be brought under central bank supervision.

27. **Public finances should be tightened for a number of reasons**. The fiscal borrowing requirement must be aligned with available financing. Euroization leaves fiscal tightening as one of the few remaining tools available to support the required improvement in

Montenegro's competitiveness. Additional fiscal reserves are required to safeguard financial stability. Finally, the experience of 2009 underscores the importance of building up fiscal space that could be used the next time adverse external shocks hit the economy.

28. **To meet these challenges, fiscal adjustment efforts need to be sustained and placed in a medium-term perspective**. The downturn revealed a large structural fiscal deficit which could not be clawed back in a single year. The authorities have appropriately adopted a medium-term fiscal framework, targeting a balanced budget by 2012. The time has now come to articulate the required policies. In this context, the inconsistency between the relatively high level of public expenditure and relatively low tax rates needs to be urgently resolved. The adjustment to the current account already underway implies that revenues from import-related taxes will remain below the levels seen during the boom. The loss must be made up from expenditure cuts or other revenue sources, and a reconsideration of past tax cuts should therefore be on the agenda. Beyond taxation, the budget has an important role to play in boosting competitiveness by alleviating pressures on wages and reducing distortions, including from extensive transfer programs, which could be better targeted. Finally, prudence is called in issuing state guarantees and there is need for a proactive approach towards the large unfunded longer-term pension liabilities.

29. **Additional labor market deregulation would be helpful**. The new labor law addressed some shortcomings, but others remain and would best be redressed by allowing opt-out clauses from collective bargaining arrangements; easing rules on labor redundancies; and reducing disincentives to hiring. Given the need for adjustment in the public services, a separate public sector collective bargaining agreement could be useful.

30. **There is also a need to improve the business environment further**. Tackling red tape, especially at the municipal level, and infrastructure bottlenecks are important, as is redressing perceived weaknesses regarding corruption. Progress in Montenegro's EU candidacy will also be important.

31. **Weaknesses in economic statistics hamper economic analysis and policy**. Notwithstanding notable progress, annual national accounts remain weak and appear with long delays, quarterly national accounts are not compiled, the external accounts are weak, and high frequency indicators have serious gaps.

32. **It is proposed that the next Article IV consultation be held on the standard 12-month cycle.**

Table 1. Montenegro: Selected Economic Indicators, 2006–13
(Under current policies)

	2006	2007	2008	2009	2010	2011	2012	2013
					Prel.	Proj.		
Real economy 1/								
Nominal GDP (millions of €)	2,149	2,680	3,086	2,941	2,935	3,128	3,383	3,641
Gross national saving (percent of GDP)	1.4	-5.6	-11.2	-9.2	2.0	9.0	11.0	13.0
Gross investment (percent of GDP)	25.4	33.8	40.6	18.0	19.0	21.0	21.0	22.0
Unemployment rate (in percent)	14.7	11.9	10.7	11.4	…	…	…	…
	(Annual percentage change)							
Real GDP	8.6	10.7	6.9	-6.6	-1.8	4.5	5.5	5.0
Industrial production	1.0	0.1	-2.1	-32.2	...	...	...	...
Tourism								
Arrivals	16.3	18.8	4.8	1.6	...	...	...	...
Nights	13.9	22.9	6.9	-3.1	...	...	...	...
Consumer prices (period average) 2/	3.0	4.2	8.5	3.4	-0.6	3.0	3.0	2.9
Consumer prices (end of period) 2/	2.8	7.7	7.2	1.5	-0.7	3.7	2.7	3.2
GDP deflator	9.0	12.7	7.7	2.1	1.6	2.0	2.5	2.5
Average net wage (12-month)	15.3	19.9	23.3	11.4	...	...	...	...
Money and credit (end of period, 12-month)								
Bank credit to private sector	138.9	175.9	25.0	-13.6	...	...	...	...
Enterprises	112.2	191.0	20.9	-15.4	...	...	...	...
Households	193.0	153.7	32.0	-10.9	...	...	...	...
Bank deposits - private sector	119.5	99.5	-14.1	-11.4	...	...	...	...
General government finances (cash) 3/	(Percent of GDP)							
Revenue and grants	41.4	47.7	48.6	43.2	41.8	39.8	39.5	39.2
Expenditure (incl. discrepancy)	39.3	40.9	48.8	46.4	48.9	47.4	45.2	44.0
Overall balance	2.1	6.7	-0.3	-3.2	-7.1	-7.6	-5.7	-4.8
Primary balance	3.3	7.8	0.5	-2.4	-6.0	-6.3	-4.0	-2.7
Privatization receipts	3.7	4.0	1.2	4.2	1.5	1.0	0.9	0.8
General government gross debt (end of period, stc	34.8	27.5	29.0	38.8	44.0	49.2	51.9	53.8
Balance of payments 1/								
Current account balance, excl. grants	-24.1	-39.5	-51.8	-27.2	-17.0	-12.0	-10.0	-9.0
Foreign direct investments	21.7	19.6	18.4	30.6	10.5	10.0	7.0	7.0
External debt (end of period, stock)	56.8	79.4	95.1	98.2	105.1	108.6	107.6	106.1
Of which: Private sector	32.8	62.1	79.4	74.4	76.2	74.3	70.3	67.3
REER (CPI-based; annual average change, in percent)								
(- indicates depreciation)	-3.5	-2.2	1.5	5.0	...	…	…	…
Memorandum:								
Aluminum price (€ per tonne)	2,051	1,929	1,760	1,157	1,241	1,517	1,655	1,724

Sources: Ministry of Finance, Central Bank of Montenegro, Statistical Office of Montenegro, Employment Agency of Montenegro; and IMF staff estimates and projections.

1/ In 2007, there is a break in the national accounts and balance of payments data, stemming mainly from the revision of exports and imports.

2/ Cost of living index for 2006-2008.

3/ Includes extra-budgetary funds and, from 2006, local governments, but not public enterprises.

Table 2. Montenegro: Macroeconomic Framework, 2005–15
(Under current policies, percent of GDP, unless otherwise noted)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
					Prel.	Proj.					
Real GDP	4.2	8.6	10.7	6.9	-6.6	-1.8	4.5	5.5	5.0	4.2	4.0
Consumer prices (end-period)	2.4	2.8	7.7	7.2	1.5	-0.7	3.7	2.7	3.2	3.2	3.2
Gross domestic savings	0.2	-4.3	-8.5	-13.8	-14.6	-3.7	6.8	8.4	10.3	10.3	10.3
Non-government	-2.3	-11.2	-22.1	-23.5	-19.7	-4.7	6.5	6.7	8.0	7.6	7.1
Government	2.5	7.0	13.6	9.7	5.0	1.0	0.3	1.6	2.4	2.7	3.2
Gross domestic investment	17.7	25.4	33.8	40.6	18.0	19.0	21.0	21.0	22.0	22.0	22.0
Non-government	13.6	20.4	26.8	30.5	9.4	10.5	12.9	13.3	14.5	14.8	14.8
Government	4.1	5.1	7.0	10.1	8.6	8.5	8.1	7.7	7.5	7.2	7.2
Net factor receipts and transfers from at	9.0	5.6	2.9	2.6	5.5	5.7	2.2	2.6	2.7	2.7	2.7
Non-government	8.9	5.4	2.8	2.5	5.1	5.4	2.0	2.3	2.4	2.4	2.4
Government	0.2	0.2	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Gross national savings	9.2	1.4	-5.6	-11.2	-9.2	2.0	9.0	11.0	13.0	13.0	13.0
Non-government	6.6	-5.8	-19.4	-21.0	-14.5	0.6	8.4	9.0	10.4	10.0	9.5
Government	2.7	7.2	13.7	9.8	5.4	1.4	0.6	2.0	2.6	3.0	3.5
Non-government national savings minus	-7.1	-26.2	-46.2	-51.5	-23.9	-9.9	-4.4	-4.3	-4.2	-4.7	-5.4
Savings - investment balance	-8.5	-24.1	-39.5	-51.8	-27.2	-17.0	-12.0	-10.0	-9.0	-9.0	-9.0
Non-government	-7.1	-26.2	-46.2	-51.5	-23.9	-9.9	-4.4	-4.3	-4.2	-4.7	-5.4
Government	-1.4	2.1	6.7	-0.3	-3.2	-7.1	-7.6	-5.7	-4.8	-4.3	-3.6
General government finances											
Revenues and grants	36.8	41.4	47.7	48.6	43.2	41.8	39.8	39.5	39.2	39.3	39.4
Expenditures	38.2	39.3	40.9	48.8	46.4	48.9	47.4	45.2	44.0	43.5	43.0
Current	34.1	34.2	33.9	38.8	37.9	40.4	39.2	37.5	36.5	36.3	35.9
Capital	4.1	5.1	7.0	10.1	8.6	8.5	8.1	7.7	7.5	7.2	7.2
Overall balance	-1.4	2.1	6.7	-0.3	-3.2	-7.1	-7.6	-5.7	-4.8	-4.3	-3.6
Structural balance	-0.4	-2.5	-4.0	-14.1	-9.6	-7.1	-6.9	-5.3	-4.8	-4.3	-3.6
Public debt (gross)	40.9	34.8	27.5	29.0	38.8	44.0	49.2	51.9	53.8	55.6	55.0
Current account	-8.5	-24.1	-39.5	-51.8	-27.2	-17.0	-12.0	-10.0	-9.0	-9.0	-9.0
Foreign direct investment (net)	21.0	21.7	19.6	18.4	30.6	10.5	10.0	7.0	7.0	7.0	7.0
External debt (estimate)	43.9	56.8	79.4	95.1	98.2	105.1	108.6	107.6	106.1	105.5	105.3
Memorandum items:											
Net export of goods and services	-17.5	-29.7	-42.3	-54.4	-32.6	-22.7	-14.2	-12.6	-11.7	-11.7	-11.7
Nominal GDP (millions of €)	1,815	2,149	2,680	3,086	2,941	2,935	3,128	3,383	3,641	3,888	4,145

Sources: Statistical Office of Montenegro, Ministry of Finance; and IMF staff estimates and projections.

Table 3. Montenegro: Summary of Accounts of the Financial System, 2005–2009
(Millions of euros)

	2005	2006	2007	Jun-08	Sep-08	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09
					I. Central Bank					
Net foreign assets	154	310	445	482	528	290	228	215	395	347
Assets	154	310	468	504	551	313	251	238	446	397
Liabilities	0	0	22	22	23	23	23	23	51	51
Net domestic assets	-123	-267	-395	-425	-466	-227	-165	-156	-336	-285
Net credit to the nonfinancial public sector	-42	-57	-98	-160	-197	-11	-17	-20	-134	-96
Net credit to the banking system	-77	-233	-342	-308	-316	-262	-195	-183	-248	-238
Required reserves	-53	-169	-259	-283	-288	-217	-170	-151	-138	-134
Giro account	-25	-64	-84	-25	-29	-46	-25	-33	-111	-104
Claims on depository institutions	0	0	0	1	1	1	0	1	1	1
Other assets net	-4	24	45	44	47	47	47	47	47	49
Equity	29	41	44	49	53	51	53	47	48	49
Deposits included in broad money	1	3	6	9	10	12	11	12	12	13
					II. Banking system					
Net foreign assets	42	-31	-457	-752	-888	-1,007	-1,088	-1,032	-768	-712
Assets	166	285	342	343	312	250	265	300	375	328
Liabilities	124	315	799	1,095	1,200	1,257	1,353	1,333	1,143	1,039 [1/]
Net domestic assets	455	1,049	2,521	2,947	3,074	2,926	2,764	2,743	2,744	2,576
Net assets held in the central bank	100	233	342	308	317	262	195	184	249	238
Net credit to nonfinancial public sector	26	24	-14	-11	-14	-78	-53	-25	-20	18
Credit to the private sector	326	780	2,151	2,591	2,712	2,683	2,565	2,524	2,459	2,278 [1/]
Other domestic assets	3	12	42	60	60	59	57	60	56	42
Liabilities to the private sector	497	1,018	2,062	2,193	2,184	1,917	1,674	1,708	1,974	1,863
Deposits	400	878	1,752	1,835	1,814	1,513	1,259	1,274	1,500	1,406
Other	97	140	310	358	371	403	414	434	475	457
o/w capital	107	149	237	281	283	279	265	271	294	333
					III. Consolidated system					
Net foreign assets	196	280	-11	-270	-360	-718	-860	-817	-373	-365
Net domestic assets	331	782	2,126	2,523	2,609	2,699	2,599	2,586	2,408	2,292
Net credit to the nonfinancial public sector	-16	-33	-112	-172	-211	-89	-70	-45	-154	-79
Credit to the private sector	326	780	2,151	2,591	2,712	2,683	2,565	2,524	2,459	2,278
Other net domestic assets	22	36	87	104	108	105	103	108	103	92
Liabilities to the private sector	498	1,021	2,068	2,202	2,195	1,928	1,684	1,720	1,986	1,876
					Year on year changes (in percent)					
Net foreign assets	373	43	-104	-216	-272	6,182	428	203	4	-49
Net domestic assets	28	136	172	90	62	27	13	3	-8	-15
Credit to the private sector	33	139	176	83	57	25	9	-3	-9	-15
Deposits	84	119	100	42	19	-14	-28	-31	-17	-7
					Ratios					
Reserves ratio	25.1	26.5	19.5	16.8	17.5	17.3	15.5	14.4	16.6	16.9
Effective required reserves ratio	13.3	19.3	14.8	15.4	15.9	14.3	13.5	11.8	9.2	9.6
Banks' capital / lending to private sector	32.8	19.1	11.0	10.8	10.4	10.4	10.3	10.8	12.0	14.6
CBCG reserves / bank deposits	38.4	35.3	26.7	27.5	30.4	20.7	20.0	18.7	29.7	28.3
Banks' foreign liabilities / lending	38.0	40.5	37.1	42.3	44.3	46.9	52.8	52.8	46.5	45.6

Sources: Central Bank of Montenegro; and IMF staff estimates.

[1/] December figures are affected by the transfer of CKB's claims on KAP to OTP.

Table 4. Montenegro: Balance of Payments, 2006–15

(Under current policies)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
				Prel.			Proj.			
	In millions of euros									
Current account balance	-518	-1,058	-1,598	-799	-499	-383	-348	-341	-366	-394
Trade balance [1/]	-855	-1,574	-2,082	-1,350	-1,163	-1,123	-1,188	-1,273	-1,402	-1,542
Exports	627	516	468	300	365	420	475	511	550	582
Imports	-1,483	-2,090	-2,549	-1,650	-1,528	-1,544	-1,663	-1,784	-1,951	-2,124
Services balance	216	440	403	390	497	670	751	836	930	1,036
Receipts	434	674	754	680	798	893	991	1,099	1,219	1,352
Expenditure	-217	-234	-351	-290	-302	-223	-240	-263	-289	-316
Net factor income	31	17	8	81	77	-26	-14	-14	-14	-14
Compensation of employees	57	75	97	110	135	144	156	167	179	191
Investment income	-26	-58	-89	-29	-58	-170	-170	-182	-193	-205
Current transfers, net	90	59	73	80	90	96	104	112	119	127
Government	7	2	9	…	…	…	…	…	…	…
Remittances	83	57	64	…	…	…	…	…	…	…
Capital and financial accounts	674	904	734	806	455	459	434	432	463	496
Capital accounts	-14	-1	0	0	0	0	0	0	0	0
Financial accounts	688	905	735	806	455	459	434	432	463	496
FDI, net	467	525	568	900	308	199	251	270	288	307
In Montenegro, net	493	640	641	900	…	…	…	…	…	…
Abroad, net	-26	-115	-74	0	…	…	…	…	…	…
Portfolio investment, net	-10	5	-16	-40	0	0	0	0	0	0
Other	231	376	183	-54	146	259	183	162	175	189
General government	15	-61	-7	-120	…	…	…	…	…	…
Commercial banks	-29	261	471	-296	-105	-93	-6	-3	-2	-1
Other non-bank sectors	245	143	-281	362	251	352	189	165	177	190
Errors and omissions	-19	305	708	50	50	53	58	62	66	70
Change in official reserves (-: increase)	-137	-151	155	-57	94	-22	-28	-30	-30	-32
Memorandum items	In percent of GDP									
Current account balance	-24.1	-39.5	-51.8	-27.2	-17.0	-12.2	-10.3	-9.4	-9.4	-9.5
Merchandile trade	-39.8	-58.7	-67.5	-45.9	-39.6	-35.9	-35.1	-35.0	-36.0	-37.2
Exports	29.2	19.2	15.2	10.2	12.5	13.4	14.0	14.0	14.1	14.0
Imports	-69.0	-78.0	-82.6	-56.1	-52.1	-49.4	-49.2	-49.0	-50.2	-51.3
Services balance	10.1	16.4	13.1	13.3	16.9	21.4	22.2	23.0	23.9	25.0
Receipts	20.2	25.1	24.4	23.1	27.2	28.6	29.3	30.2	31.3	32.6
Payments	-10.1	-8.7	-11.4	-9.9	-10.3	-7.1	-7.1	-7.2	-7.4	-7.6
Foreign direct investment	21.7	19.6	18.4	30.6	10.5	6.4	7.4	7.4	7.4	7.4
Gross external debt	56.8	79.4	95.1	98.2	105.1	108.6	107.6	106.1	105.5	105.3

Sources: Central Bank of Montenegro; and IMF staff estimates.

1/ For consistency with the national accounts, merchandile trade is based on special trade. This provides a better covereage of imports than general trade but may underrecord exports.

Table 5. Montenegro: Consolidated General Government Fiscal Operations, 2008–2015 1/
(in percent of GDP)

	2008	2009	2010	2011	2012	2013	2014	2015
	Prel.	Prel.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
Total revenues and grants	48.6	43.2	41.8	39.8	39.5	39.2	39.3	39.4
Total revenues	48.4	42.9	41.4	39.5	39.2	38.9	39.0	39.1
Current revenues	48.0	42.4	41.1	39.2	38.8	38.5	38.6	38.7
Taxes	30.0	27.1	25.7	23.9	23.5	23.3	23.3	23.4
Personal income tax	4.6	4.1	3.1	3.1	3.1	3.1	3.1	3.1
Corporate income tax	2.0	1.9	1.8	1.7	1.6	1.6	1.7	1.7
Taxes on turnover of real estate right	1.2	0.7	0.6	0.6	0.6	0.6	0.6	0.6
Value added tax	14.3	12.6	11.8	10.6	10.5	10.5	10.7	10.8
Excises	3.9	4.4	5.1	4.8	4.5	4.3	4.2	4.1
Taxes on international trade	2.4	1.7	1.6	1.4	1.4	1.4	1.4	1.5
Local government taxes	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Other taxes	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Social security contributions	9.7	9.0	9.5	9.5	9.5	9.5	9.5	9.5
Nontax revenues	8.3	6.4	5.8	5.7	5.7	5.7	5.7	5.7
Capital revenues	0.4	0.5	0.3	0.3	0.4	0.4	0.4	0.4
Grants	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total expenditures and net lending	48.8	46.4	48.9	47.4	45.2	44.0	43.5	43.0
Total expenditures	47.1	47.7	48.9	47.4	45.3	44.1	43.6	43.1
Current expenditures	20.5	20.9	23.5	23.3	22.3	21.9	21.6	21.6
Gross salaries	11.2	11.0	11.9	11.9	11.3	10.8	10.5	10.1
Other personal income	0.9	0.9	1.1	1.1	1.1	1.0	1.0	1.0
Goods and services	6.4	5.8	7.3	7.0	6.9	6.8	6.7	6.7
Interest payments	0.8	0.9	1.1	1.3	1.7	2.1	2.4	2.7
Rent	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
Subsidies to enterprises	0.7	1.7	1.5	1.4	0.7	0.6	0.6	0.6
Social security transfers	11.4	13.2	13.2	12.8	12.4	12.0	11.7	11.4
Other transfers	4.5	4.4	3.4	2.7	2.5	2.4	2.6	2.5
Capital expenditures	10.1	8.6	8.5	8.1	7.7	7.5	7.2	7.2
Reserves	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4
Net lending	1.8	-1.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Overall Balance	-0.3	-3.2	-7.1	-7.6	-5.7	-4.8	-4.3	-3.6
Financing	0.3	3.2	7.1	7.6	5.7	4.8	4.3	3.6
Domestic financing	-1.2	-5.1	0.4	-0.6	-0.7	-0.2	-0.1	-0.1
Banking system	2.4	-3.9	3.3	0.6	0.0	0.0	0.0	0.0
Nonbank	-3.6	-1.2	-2.9	-1.3	-0.7	-0.2	-0.1	-0.1
Foreign financing	0.2	4.2	-0.5	-1.8	-3.2	-4.7	-6.3	-7.1
Privatization receipts	1.2	4.2	1.5	1.0	0.9	0.8	0.5	0.0
Unidentified	0.0	0.0	5.6	9.0	8.7	8.9	10.2	10.9
Memorandum items:								
GDP (million of Euro)	3085.6	2941.4	2934.7	3128.1	3382.7	3640.6	3888.4	4145.0
Primary Balance	0.5	-2.4	-6.0	-6.3	-4.0	-2.7	-1.8	-0.9

Source: Ministry of Finance; and Fund staff estimates and projections.
1/ Includes republican budget, extra-budgetary funds and local governments.

Table 6. Montenegro: Financial Soundness Indicators of the Banking Sector, 2005–Dec. 2009

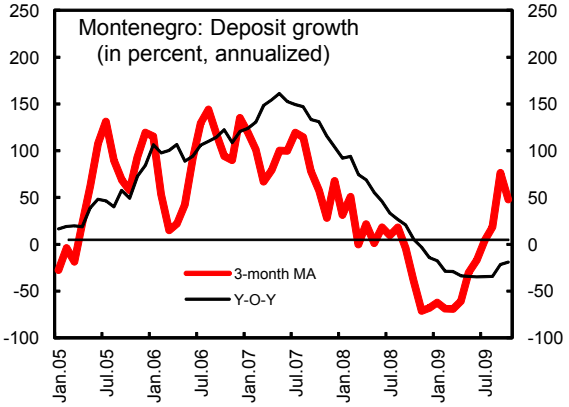
	2005	2006	2007	2008				2009			
	Dec.	Dec.	Dec.	Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.
Capital adequacy											
Regulatory capital as percent of risk-weighted assets	27.8	21.3	17.1	17.2	16.6	15.6	15.0	12.4	11.9	12.9	15.7
Capital as percent of assets	15.3	10.4	8.0	8.3	8.2	8.1	8.4	8.4	8.6	9.1	11.0
Asset composition and quality											
Distribution of bank credit by borrower											
Central government, local government, government agencies	7.0	4.2	1.4	0.4	1.3	1.3	1.0	0.6	0.7	0.9	1.3
Funds	3.1	2.1	0.6	0.7	0.5	0.5	0.4	0.9	1.1	1.2	1.2
State-owned companies	5.2	2.7	1.0	1.2	1.2	1.4	1.0	1.2	1.4	1.6	1.9
Private companies, entrepreneurs	56.5	52.7	60.6	59.7	59.1	58.8	59.2	58.1	58.6	58.3	56.4
Banks	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
Financial Institutions	0.0	0.7	0.9	0.6	0.9	0.9	0.8	0.8	0.7	0.5	0.3
Citizens	27.5	36.3	34.5	35.3	35.6	35.6	35.8	36.2	35.5	35.3	36.6
Credit cards	0.3	0.4	0.9	1.0	1.1	1.2	1.3	1.5	1.6	1.6	1.7
Other	0.3	0.9	0.0	0.0	0.0	0.4	0.4	0.7	0.5	0.5	0.6
Distribution of bank credit by sectoral economic activity											
Agriculture, hunting, fishing	1.9	1.0	1.0	0.6	0.4	0.6	0.6	0.7	0.5	0.5	0.3
Mining and energy	2.7	1.7	1.0	1.2	1.8	1.7	1.6	2.2	1.4	2.1	1.5
Civil engineering	5.0	7.3	9.0	8.4	7.7	8.9	7.2	7.5	7.4	7.1	0.7
Trade	34.4	31.3	26.1	25.9	25.7	25.2	22.6	22.7	23.3	22.6	22.8
Services, tourism	7.7	7.8	8.6	10.8	8.5	8.0	7.7	8.9	9.4	9.1	7.5
Transport, warehousing, communications	4.4	1.5	3.6	3.8	3.2	3.0	3.1	3.3	2.7	2.8	2.6
Finance	3.0	1.1	2.8	1.4	2.4	2.3	2.5	2.8	2.7	2.4	2.4
Real estate trading	2.9	0.8	3.6	3.2	1.9	2.0	4.2	4.1	4.1	4.5	4.4
Administration, other public services	5.3	4.5	2.9	3.4	2.4	2.6	2.0	1.9	1.9	2.2	2.6
Consumer loans	26.3	36.6	35.1	35.4	36.1	35.6	36.4	36.8	36.5	37.0	38.5
Other	6.6	6.6	6.3	5.9	9.8	9.2	12.1	8.8	9.7	9.8	9.1
Asset quality											
Non-performing loans (NPL), in percent of gross loans	5.3	2.9	3.2	3.0	3.9	4.5	7.2	8.8	10.0	9.6	13.5
Provisions, in percent of NPL	67.4	78.8	73.6	85.3	68.5	63.7	55.6	53.1	56.0	62.8	46.3
Provisions, in percent of total loans	3.6	2.2	2.3	2.6	2.7	2.8	4.0	4.7	5.6	6.0	6.3
NPL net of provisions, in percent of capital	6.1	3.5	7.9	4.2	11.9	16.4	32.0	42.0	42.8	31.2	52.5
Earnings and profitability											
Gross profits, in percent of average assets (ROAA)	0.9	1.2	0.8	0.3	0.7	0.4	-0.6	-1.5	-1.6	-0.9	-0.6
Gross profits, in percent of average equity capital (ROAE)	6.1	11.6	10.5	3.7	8.3	5.0	-6.6	-17.4	-18.7	-9.9	-7.0
Net profits, in percent of average assets (ROAA)	0.8	1.1	0.7	0.2	0.6	0,31	-0.6	-1.5	-1.6	-0.9	-0.7
Net profits, in percent of average capital (ROAE)	4.2	6.8	6.2	2.6	6.4	3.5	-6.9	-17.8	-18.9	-10.2	-8.0
Net interest margin 1/	5.4	3.5	3.0	0.9	1.8	2.8	3.8	1.0	2.2	3.5	4.9
Gross income, in percent of average assets	11.1	8.9	7.0	5.9	5.7	5.4	5.1	4.3	4.8	5.0	5.3
Net interest income, in percent of gross income	48.3	50.6	55.4	61.2	63.1	67.7	67.7	80.5	75.0	74.7	74.2
Non-interest income, in percent of gross income	51.7	49.4	44.6	38.8	36.9	32.3	32.3	19.5	25.0	25.3	25.8
Net fee income, in percent of net interest income	75.8	75.6	57.1	53.1	50.7	43.5	43.3	26.3	27.3	27.4	27.2
Trading income, in percent of gross income	15.0	11.1	12.9	6.3	4.8	0.0	0.0	-1.7	0.0	0.0	0.0
Aggregate overhead expenses, in percent of gross income	70.0	71.9	57.3	49.5	52.2	55.4	61.4	65.5	62.1	60.6	62.3
Liquidity											
Liquid assets, in percent of total assets	38.4	30.3	18.1	14.6	14.3	12.9	11.2	10.5	11.7	16.0	15.3
Liquid assets, in percent of short-term liabilities	58.7	53.6	32.0	27.6	27.3	24.0	20.9	19.6	21.9	26.8	25.8
Deposits, in percent of assets	70.1	75.2	70.3	68.5	66.8	66.3	60.1	55.7	56.0	58.9	60.3
Loans, in percent of deposits	77.1	78.8	107.4	115.3	119.5	122.6	140.5	152.3	149.9	135.3	131.4
Sensitivity to market risk											
Original maturity of assets (in percent of total)											
Less than 3 months	56.8	45.3	31.1	26.9	25.5	27.3	24.7	23.0	28.5	31.5	30.4
3 months to 1 year	17.4	18.1	20.4	21.0	23.1	21.7	23.6	24.2	20.8	20.7	20.5
1 to 5 years	22.0	25.6	34.0	36.9	35.8	34.3	35.0	36.1	34.5	29.2	33.9
Over 5 years	3.8	11.0	14.6	15.1	15.6	16.6	16.8	16.7	16.2	18.6	15.3
Original maturity of liabilities (in percent of total)											
Less than 3 months	60.4	46.4	35.0	31.8	27.3	31.2	32.2	34.2	32.4	41.3	34.7
3 months to 1 year	16.0	22.5	27.3	26.2	30.2	28.0	27.2	25.1	27.0	25.6	32.4
1 to 5 years	19.1	24.6	28.7	34.7	35.1	32.4	31.7	30.4	30.5	23.6	23.5
Over 5 years	2.9	6.5	9.1	7.3	7.4	8.4	8.8	10.3	10.1	9.5	9.4

Source: Central Bank of Montenegro.

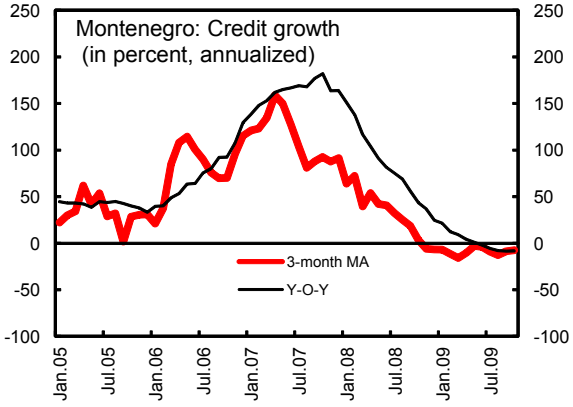
1/ Net interest income in percent of interest bearing assets

Figure 1. Montenegro: Financial Sector Developments, 2005-09

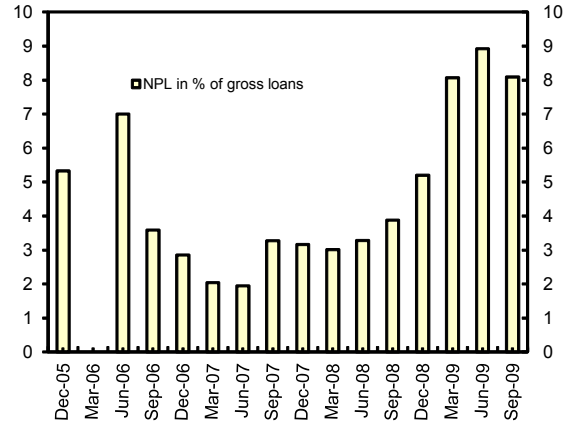
Massive deposit withdrawals have…



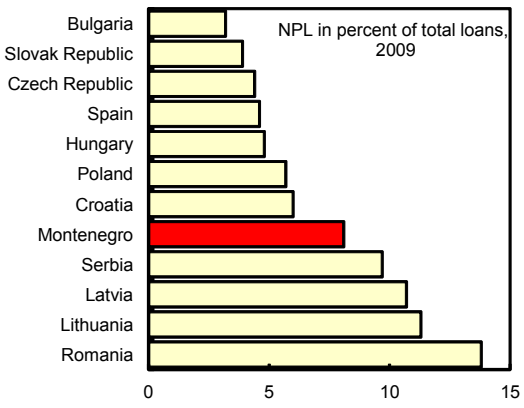
… brought credit to a halt.



With the economy weakening, NPL have been rising fast…



… and are now above average.

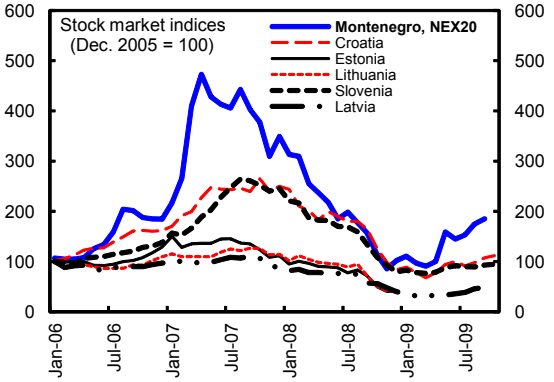


The banking system is largely foreign-owned and highly concentrated

	Number	Market share	
		Loans	Deposits
	(In percent, Sept. 2009)		
Foreign	9	84	82
o/w Large	3	63	59
Domestic	2	16	18
o/w Large	1	16	17
Total	11	100	100

Source: Central bank of Montenegro.

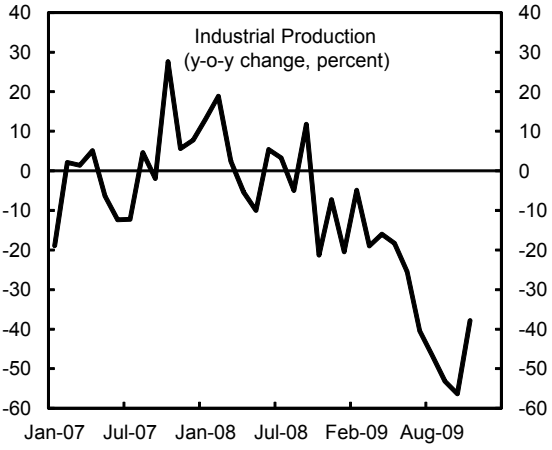
Despite a recent rally, equity prices remain below their 2006 level.



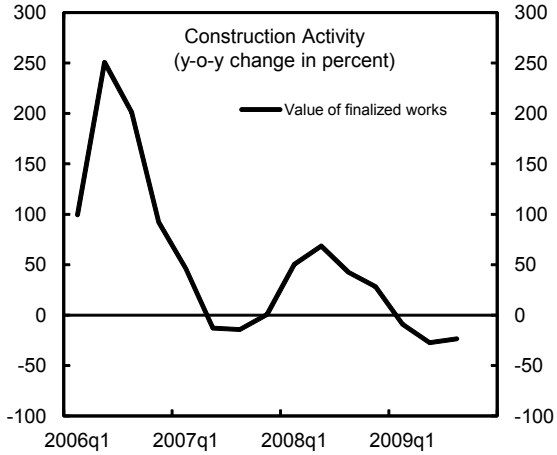
Sources: Central Bank of Montenegro; Global Stability Report (Oct 2008); Bloomberg; and IMF staff calculations.

Figure 2. Montenegro: High frequency indicators suggest a sharp downturn in 2009

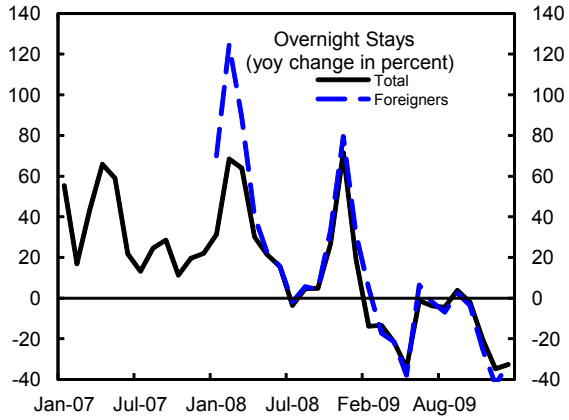
The downturn is pronounced in industry…



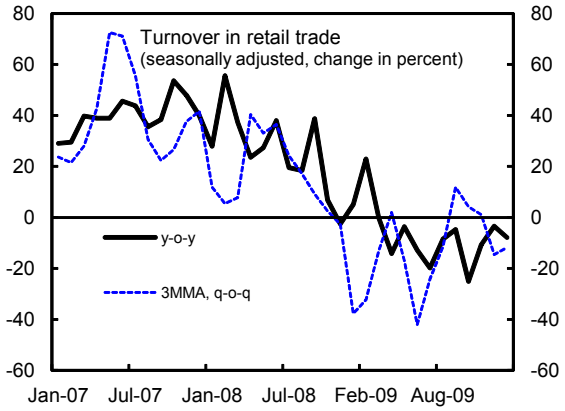
… construction…



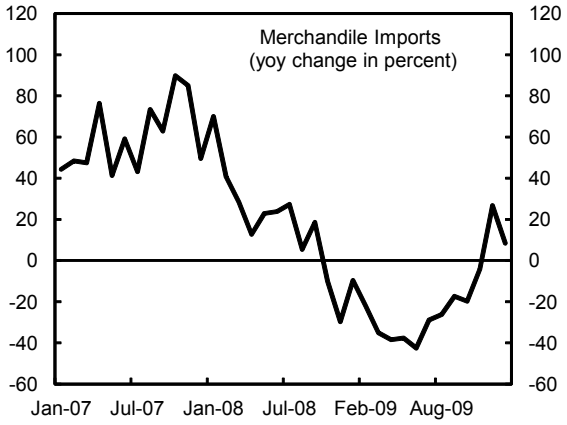
… but less so in tourism.



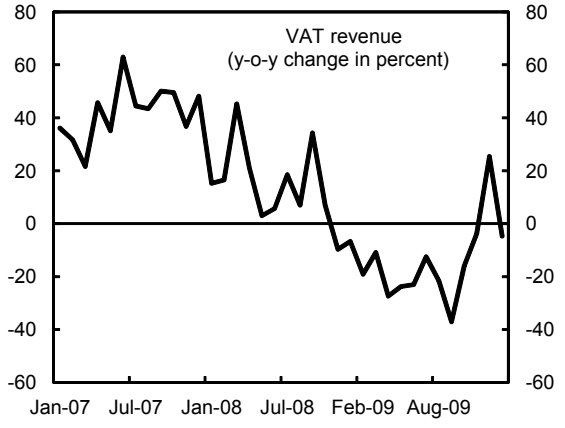
Contraction of demand is evident in retail trade.



After a sharp contraction in the aftermath of the financial crisis, imports …



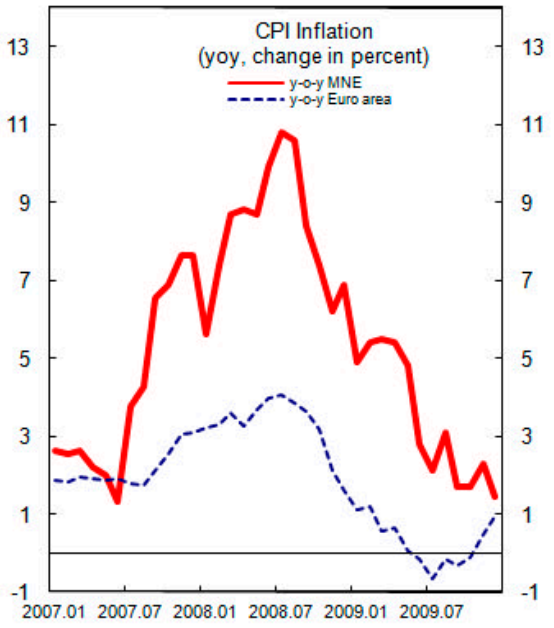
… and VAT revenue are stable but at a lower level.



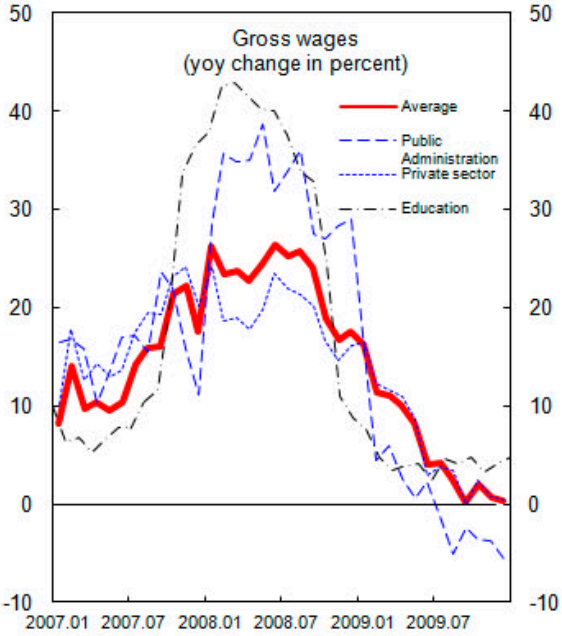
Sources: MONSTAT; Central Bank of Montenegro; Ministry of Finance; and IMF staff calculations.

Figure 3. Montenegro: Inflation pressures have been declining

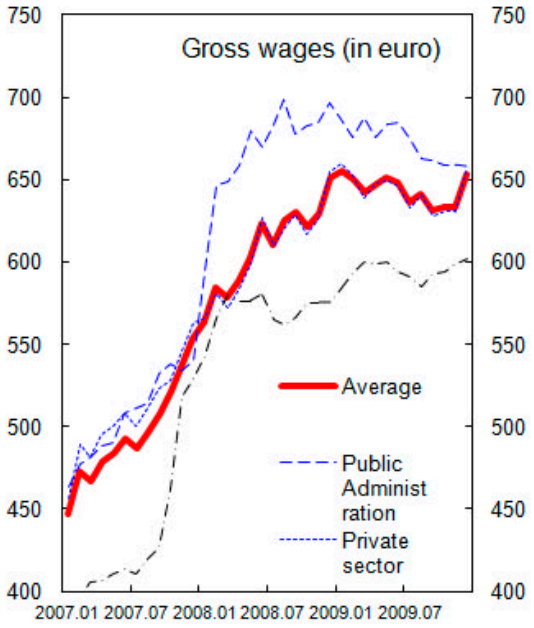
Slowing demand has been taking pressure off prices…



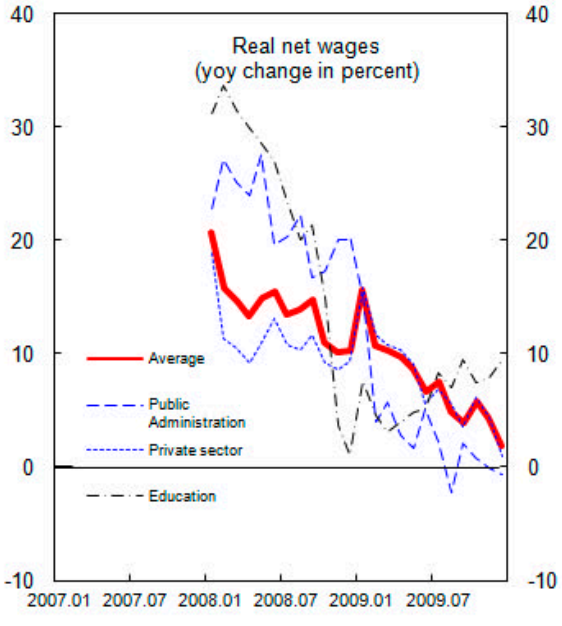
… and wages.



Public administration wages remain above average.



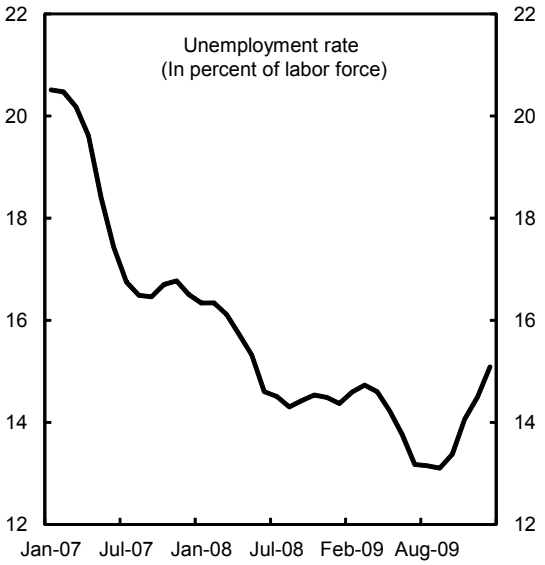
Helped by tax cuts, real net wages continue to grow on average.



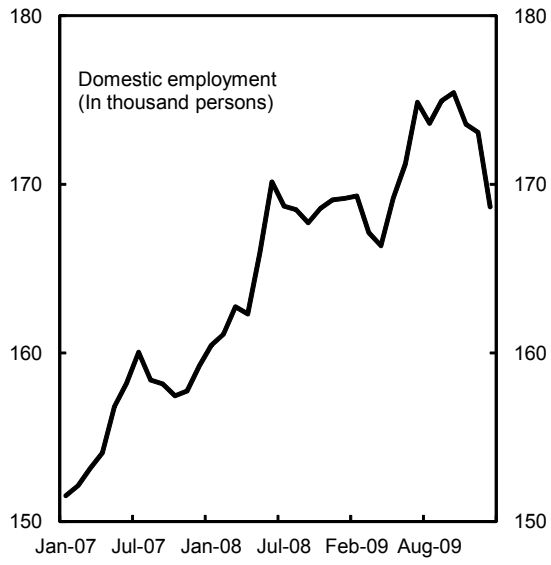
Sources: MONSTAT; Central Bank of Montenegro; and IMF staff calculations.

Figure 4. Montenegro: Development of Labor Market, 2007-09

Unemployment rate has started to rise …



... and domestic employment has been declining.



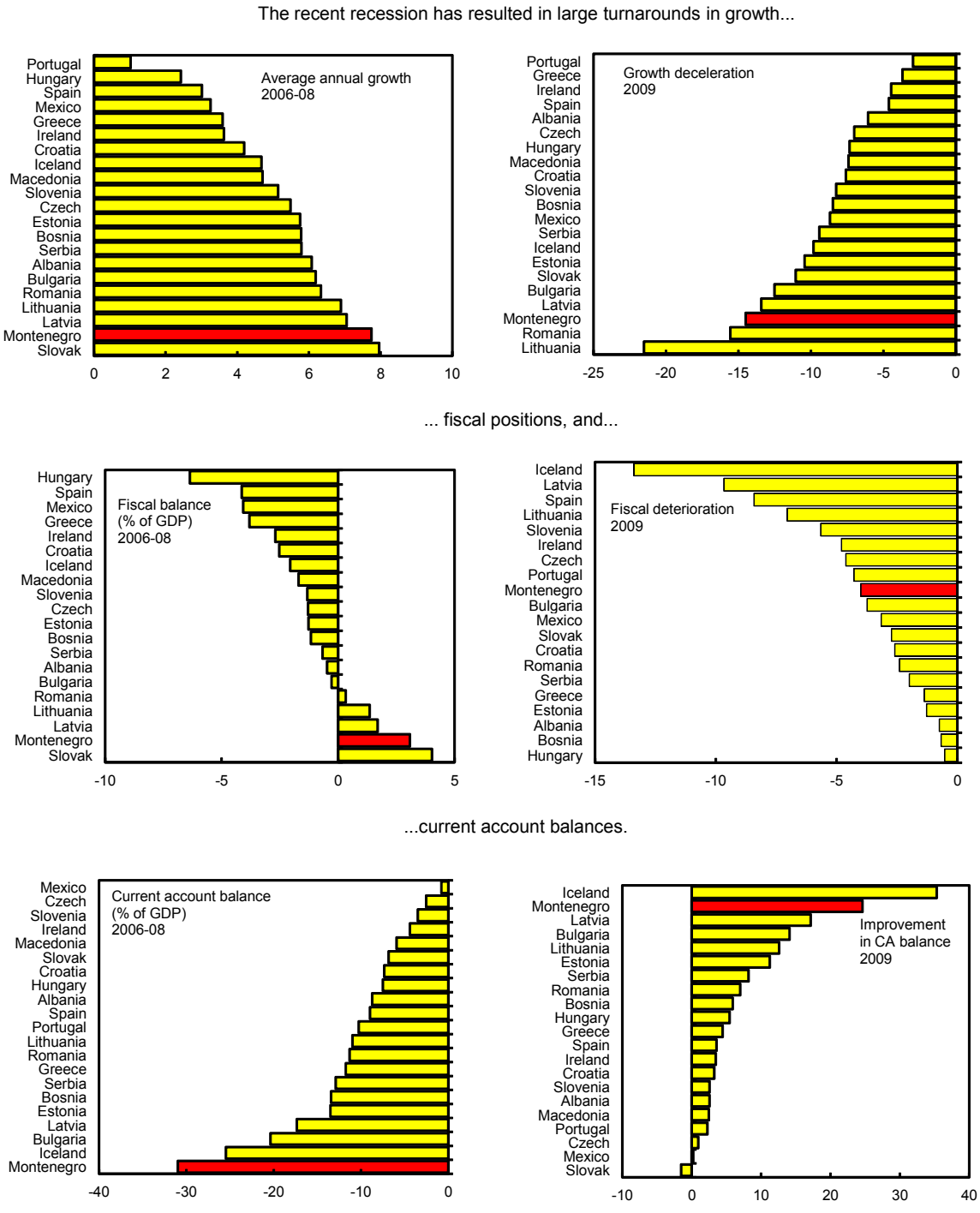
Sources: MONSTAT; and IMF staff calculations.

Employment in effective term has also declined due to less working hours by domestic workers and decline in the number of foreign workers.

	2008	2009	% change
(a) Employment (Montenegrin, in thousand)	1994.4	2057.4	3.2
(b) Foreign Workers (in thousand)	77.0	16.0	-79.2
Effective employment in total	2071.4	1780.8	-14.0

Source: MONSTAT; Ministry of Labor; Employment Fund; and IMF staff estimates. Effective employment includes adjustments for hours worked of Montenegrin workers and length of employment of foreign workers.

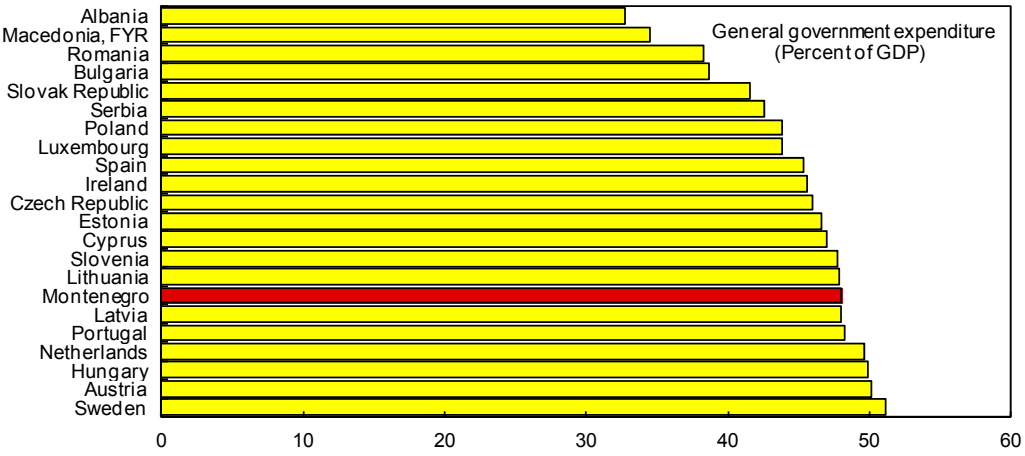
Figure 5. Macroeconomic Developments in International Perspective



Sources: WEO; and IMF staff calculations.

Figure 6. Key fiscal parameters: international comparison, 2009.

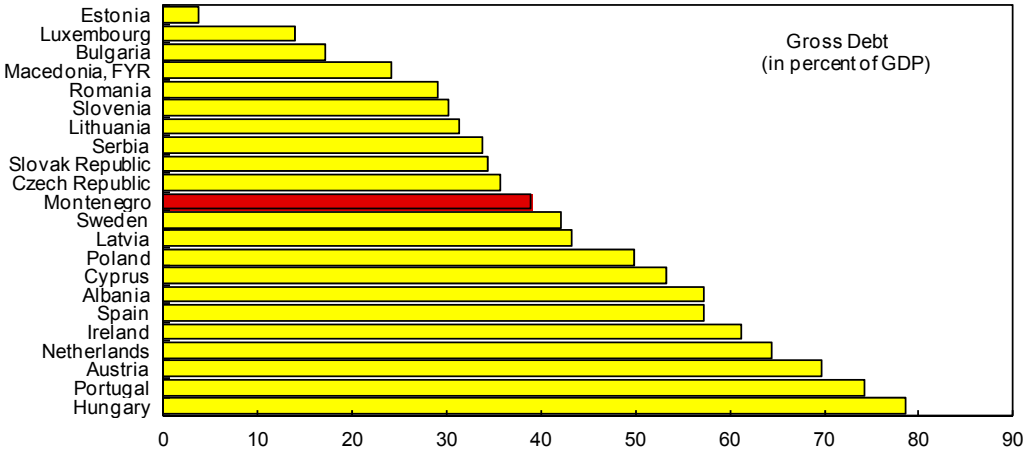
The size of government in Montenegro is above average...



…while tax rates are low by international standards.

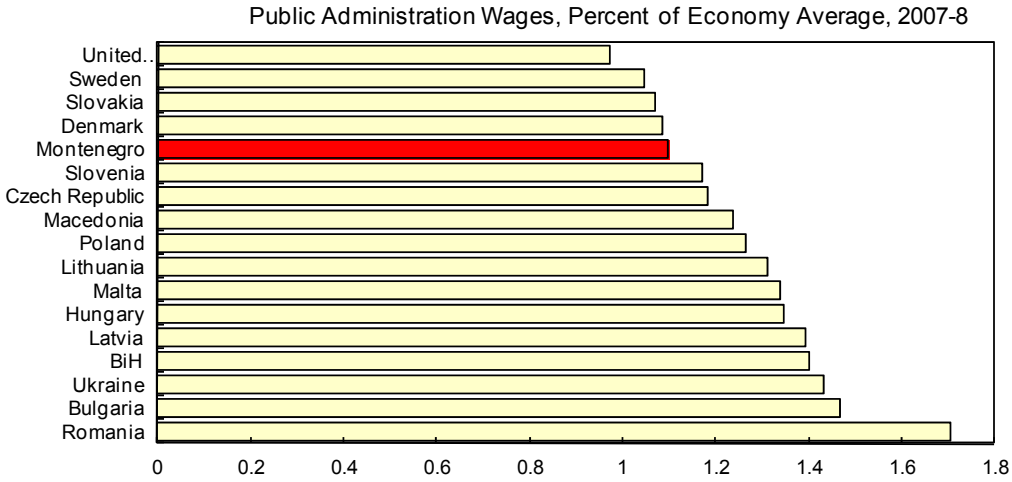
	Personal income tax	Corporate income tax	Value added tax
	(Tax rates in percent)		
Albania	10	10	20
Bulgaria	10	10	20
Croatia	15-45	20	23
Estonia	20	21	20
Germany	14-45	30-33	19
Greece	0-40	25	19
Italy	23-43	31	20
Lithuania	15-20	20	19
Macedonia	10	10	18
Montenegro	9	9	17
Serbia	10-20	10	18
Slovakia	19	19	19
Slovenia	16-41	21	20

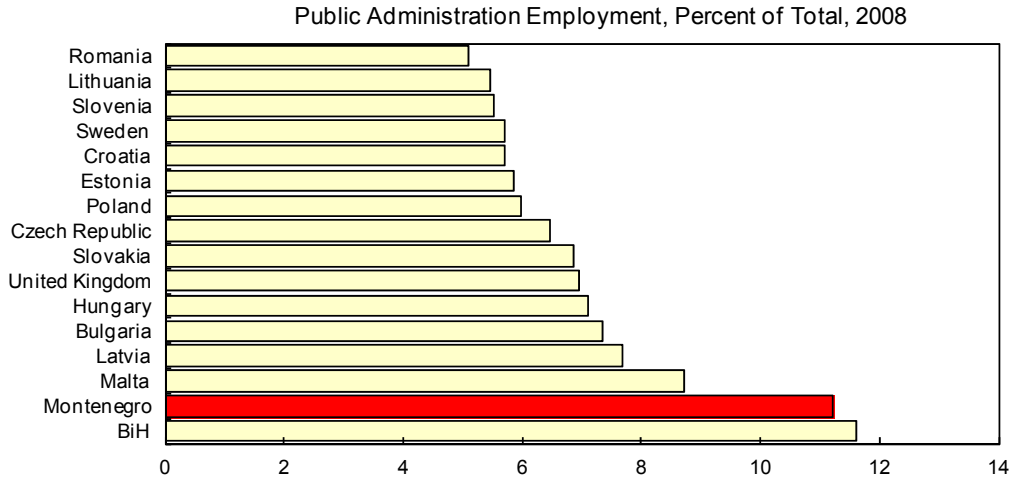
Debt is about average.

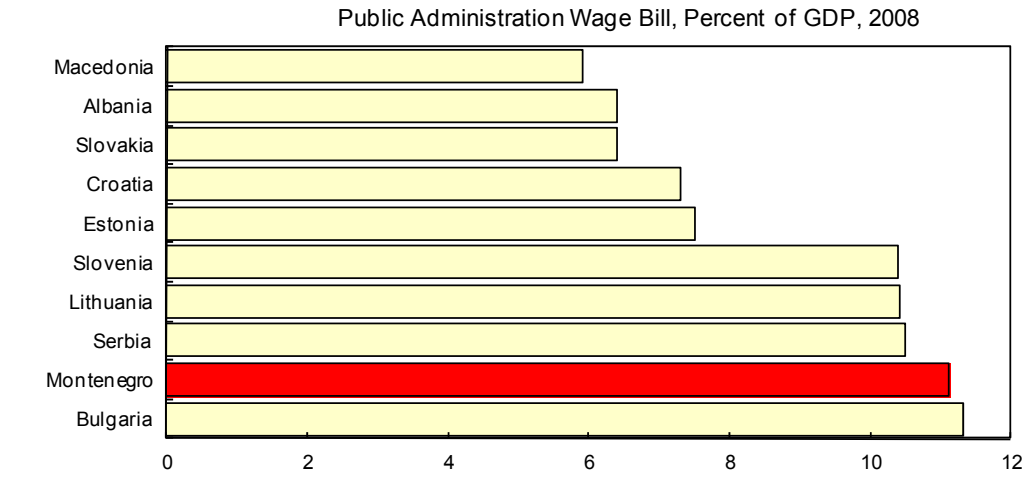


Source: WEO and IMF staff estimates.

Figure 7. Public Administration Wages and Employment, 2007-8 1/



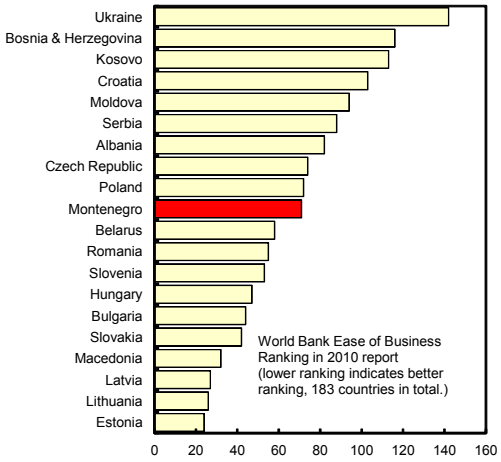




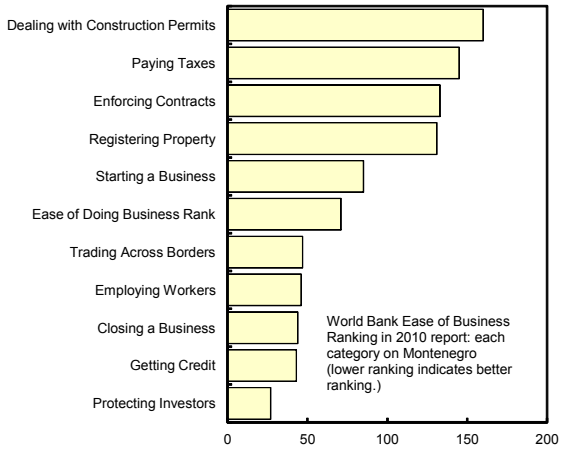
Sources: Eurostat; Authorities' data; and IMF staff calculations.
1/ Public administration plus social insurance.

Figure 8. Montenegro: Structural Indicators

Montenegro is at middle in the region in business environment ranking of World Bank.



However, in some categories, rankings are still low (e.g. dealing with construction permits, and paying taxes).



Source: World Bank

Annex I. Regional Experiences with Recent Deposit Withdrawals and Credit Contraction[1]

The sharp reductions in both deposits and credit to the private sector seen in Montenegro in the last 1–1½ years stand out in a regional comparison. The decline in deposits has been, moreover, much more prolonged than in most other countries. These recent negative developments are the mirror image of developments during the boom years.

The sharp reduction in deposits seen in Montenegro stands out even in a regional comparison. In the period from August 2008, just as the current global crises took off, until October 2009 declining deposits were observed in a number of South Eastern, Eastern and Central European countries, but the drop was by far the sharpest in Montenegro. Only two other countries (Bosnia and Herzegovina, and Latvia) witnessed declines in the double digits; and on an unweighted average basis, the other countries registered a slight increase in deposits of about ½ percent.[2]

Another important difference compared to most of the countries is that the bottom was reached much later. While the median country saw a rebound already in late 2008, deposits continued to decline through April 2009 in Montenegro.

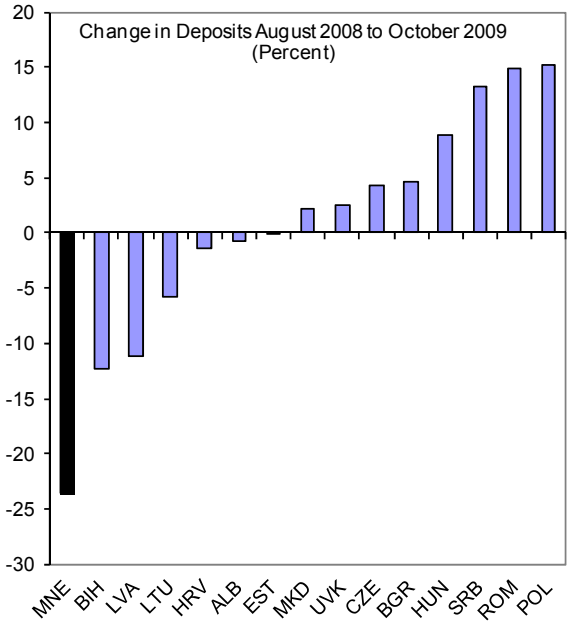
The adverse deposit developments were reflected in credit to the private sector. Looking at the same period, the decline in credit was the sharpest in Montenegro, although the difference in percentage points to other countries is less. Only three other countries (Bosnia and Herzegovina, Estonia, and Lithuania) actually registered a decline, and the unweighted average for all the countries was an increase of credit by about 7½ percent. The general picture is not altered when looking at slightly different time periods.

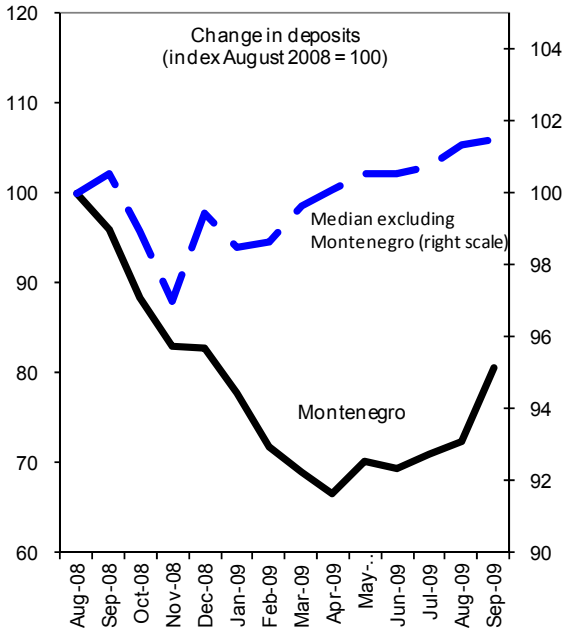
These negative developments in the past 1½ years in Montenegro are the mirror image of developments during the boom years. While deposit growth and credit expansion in 2003–07 were very fast in most countries, they were significantly faster in Montenegro where both deposit and credit expanded by more than 50 percentage points of GDP. However, it is worth noting that the link between credit and deposit growth follows a similar pattern as in other countries. All countries saw higher, or, in some cases, much higher credit growth than deposit growth.

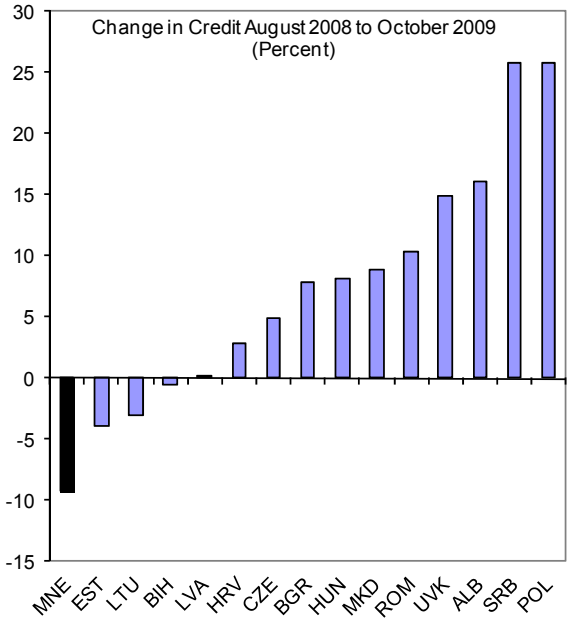
[1] Prepared by Erik Lundback.

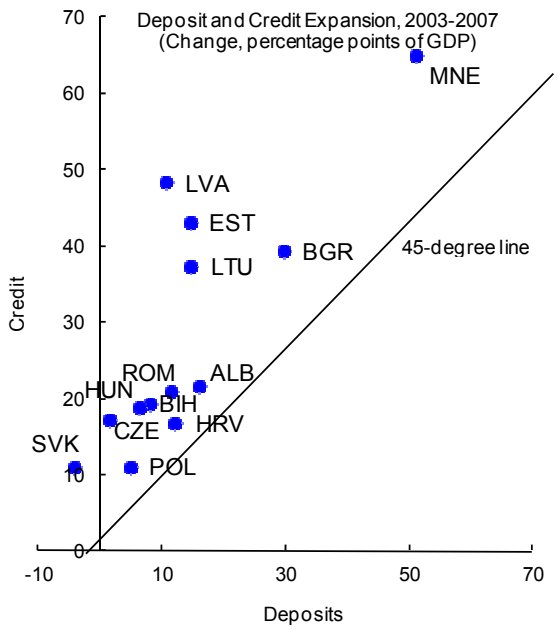
[2] Not including CIS or euro area countries.

Recent Regional Experiences with Deposits and Credits









Source: IFS and IMF staff calculations.

A country comparison suggests that the exchange rate regime has had an impact on deposits and credit. While many factors affect deposits and credit, there are clear-cut similarities in the recent deposit and credit development for countries with the same exchange rate regime classification.[3] Countries with an independent float (Albania, Czech Republic, Hungary, Poland) or managed float (Romania, Serbia) had notably higher growth in both deposits and credit, than countries with a peg (Croatia, Latvia, Macedonia) or a currency board (Bosnia and Herzegovina, Bulgaria, Estonia, Lithuania).[4] While Montenegro's experience follows a similar—though more pronounced—pattern to the one in the latter groups, the experience of Kosovo, the other country using the euro is quite different.

The extent of current account deficits in the years before the global crises also seems to have had an effect. The five countries with the largest current account deficits on average in 2003–07 (Latvia, Montenegro, Bosnia and Herzegovina, Bulgaria, and Estonia)[5] have subsequently since the beginning of the crisis had the weakest growth in both deposits and credit.

Change in Deposits August 2008 to October 2009 in Select Countries	
(average, percent)	
All	0.7
Grouped by exchange rate regime	
Floating	6.9
Managed Float	14.1
Peg	-3.4
Currency board	-3.4
No domestic currenc	-10.5
Grouped by current account deficit	
High	-8.5
Medium	7.8
Low	3.9

Source: IMF staff estimates

Change in Credit August 2008 to October 2009 in Select Countries	
(average, percent)	
All	7.3
Grouped by exchange rate regime	
Floating	13.8
Managed Float	18.1
Peg	4.0
Currency board	0.1
No domestic currency	2.9
Grouped by current account deficit	
High	-1.1
Medium	10.3
Low	11.7

Source: IMF staff estimates

[3] IMF Annual Report on Exchange Arrangements and Exchange Restrictions.

[4] For countries with an independent or managed float, this is more than just the valuation effect on the level of foreign currency deposits and credit from changes in the exchange rate. Looking only at domestic currency deposits it is still the case that countries with more flexible regimes have seen increases in deposits, and even when total deposits are calculated at a constant exchange rate, there has still been an increase.

[5] Extending the sample to 2003–08 does not change the country composition.

The policy responses have naturally varied across countries, but there are some common themes.

- Most, if not all, countries increased the ceiling for insured deposits or publicly guaranteed that deposits would be safe. In Montenegro, a temporary blanket guarantee was issued in late 2008.

- In many cases, including Montenegro, parent banks abroad provided funding, or at least committed to support their subsidiaries and not to leave.

- Several countries also lowered reserve requirements, including e.g. Bosnia and Herzegovina, Bulgaria, Croatia, and Lithuania, and Serbia, as well as Montenegro.

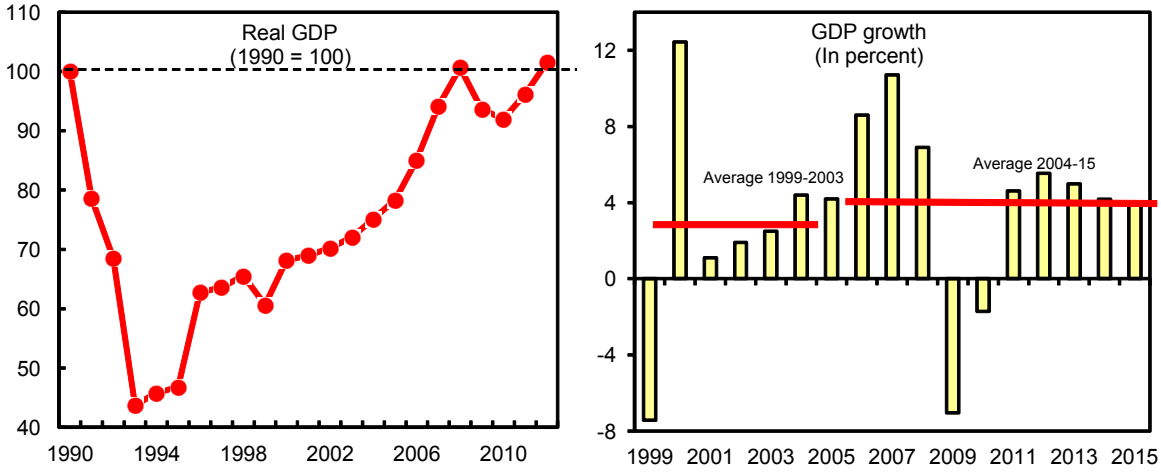
- Countries with a more flexible exchange rate regime could more easily respond by simply increasing the amount of available liquidity. This was the case in e.g. Albania and Serbia.

Annex II. Estimates of Potential Growth and Output Gap in Montenegro[1]

The GDP contraction in 2009 appears to have practically eliminated the accumulated overshooting during the past few years of strong growth. A small negative output gap is projected to emerge in 2010–11 and to close in the following years. There is considerable uncertainty surrounding the estimates as the rapid transformation and small size of the economy as well as a weak statistical base pose serious challenges in assessing potential growth and economic slack in Montenegro.

GDP growth in Montenegro has been very volatile, imparting considerable uncertainty in disentangling the cyclical component of growth. The recovery of economic activity from its very depressed levels in the 1990s, the massive structural changes during the past decade, and the strong post-independence boom (which was exacerbated by the global real estate boom) make it difficult to accurately estimate potential growth and the cyclical component of GDP, especially in real time. Crude calculations suggest that in 2008 real GDP returned to its 1990 level (Figure 1). But notwithstanding some difficult legacies (notably the aluminum complex KAP), the profile of the country and its potential are now very different from what they were only five years ago. This weakens the relevance of distant history (and long statistical series) for prediction. Ocular inspection of the data suggests that the average growth rate has increased from 2½ percent in 1999–2003 to about 4 percent since then. These rates represent a good first approximation of potential growth in these two periods.

Montenegro: Output Volatility



Source: Monstat, Vuketic (2004) and IMF staff estimates.

[1] Prepared by Anastassios Gagales.

Growth projections are indispensable for assessing potential growth and the output gap. They are needed to mitigate the end-of-sample problem in estimating HP filters and help incorporate important nonsample information in the estimations. The GDP projections below are based on the production function approach and the following assumptions:

- investment will recover, after a brief slump, to its pre-recession level (Montenegro has untapped potential in tourism, energy and transportation);
- labor force participation (which is currently low by international standards) is expected to increase, partly due to the substitution of domestic for foreign labor;[2]
- TFP growth should pick up due to cyclical and temporary factors (e.g. higher capacity utilization in recently completed investments).

Montenegro: Real GDP Growth and its Determinants, 2001–15

	Actual		Projection	
	2001-04	2005-08	2009-10	2011-15
	(Annual rates of change, in percent)			
Real GDP	2.5	7.6	-4.4	4.7
Labor productivity	2.0	-0.3	0.6	1.9
TFP	1.3	-1.1	-0.7	1.6
Capital deepening	0.7	0.8	1.3	0.3
Hours of work 1/	0.0	0.0	-2.3	1.0
Employment 2/	0.5	8.1	-2.6	1.8
Domestic	0.5	3.4	1.8	1.8
Foreign	0.0	4.7	-4.4	0.0
Memorandum items:				
Population growth	0.4	0.2	0.3	0.3
Labor force participation	29.7	29.4	30.6	32.8
Unemployment rate	22.3	10.7	11.2	10.3
Share of foreign employment	0.0	15.4	7.4	6.4
Investment rate	15.6	27.6	18.5	21.6

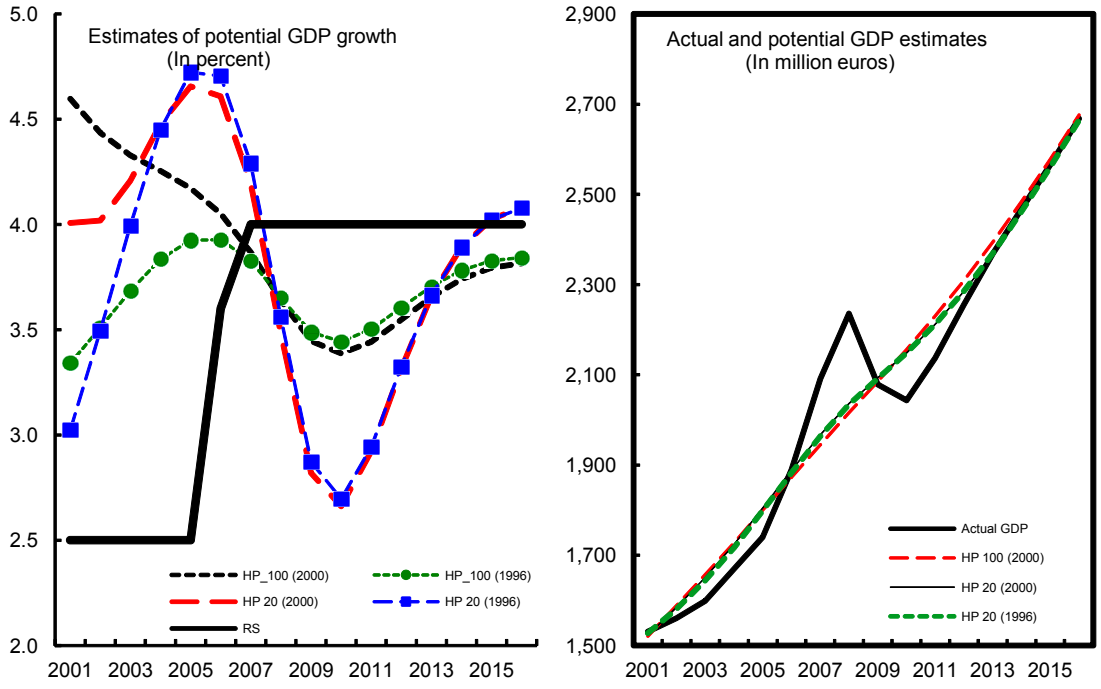
Source: Monstat and IMF staff calculations and projections.
1/ Staff estimate based on circumstantial evidence.
2/ Not adjusted for variations in the degree of labor utilization.

[2] To better measure the impact of (i) the massive drop in the number of foreign workers in 2009 and, at the same time, (ii) the tendency to have longer contracts following the rise in the fixed cost of employing foreigners, foreign employment is estimated in effective terms. A similar adjustment is made in domestic employment to capture circumstantial evidence that an increasing number of domestic workers have been asked to take unpaid leave or work shorter hours.

The Hodrick-Prescott filter (HP) is ill-suited for estimating potential output in small economies experiencing large transitory shocks (vast FDI inflows, fast financial deepening etc). The problem is that HP (i) imposes a smoothness constraint on potential GDP, an untenable assumption for small economies where the law of large numbers does not work and even a single large project could radically change the course of the economy, and (ii) is not designed to filter out middle-frequency transitory shocks—such as a protracted FDI boom—that may well not be correlated with the business cycle.

These shortcomings introduce bias in potential growth estimates. First, the estimates for the early 2000s are biased upwards by high GDP growth rates in the subsequent years. These potential growth estimates remain high even after extending the GDP series backwards (using Vuketic's estimates for pre-2000 GDP) to minimize sample-end problems. The reduction of the smoothness parameter (λ) from 100 to 20 mitigates but does not eliminate the problem of high potential growth estimates in the early 2000s. A second problem with the HP estimates for Montenegro is that they imply that the economy was operating at potential in 2006 despite strong evidence (large current account deficit and high inflationary pressures) that in that year GDP was clearly above potential. This biases downwards the output gap for a number of years.

Montenegro: Estimates of Potential Growth



Source: IMF staff estimates.

The HP filter suggests:

- **The weakening of potential growth during the 2009–10 downturn and also in the medium-term**. The weakening (but also the volatility of potential growth) is more pronounced when the smoothness parameter (λ) is set at 20. Looking forward, potential growth recovers to 4 percent and is consistent with the output gap closing by 2015.
- **The elimination of the output gap in 2009 and the opening of a significant negative gap of -4 ½ percent in 2010**that is gradually eliminated by 2015.

The regime switching methodology (RS) is more suitable for estimating potential growth in Montenegro. This approach replaces the smoothness constraint with the assumption that the economy alternates over time between a number of states, say "low growth" and "high growth." The states of nature cannot be observed directly. Observables are actual GDP growth (which is a noisy indicator of the underlying growth rate) and other ancillary indicators. These can be used to estimate the probability of being in any given state and transition probabilities of moving across states. The short sample period precludes a meaningful formal estimation of such probabilities, but circumstantial evidence suggests that the switch from low to high growth (driven by massive FDI inflows and financial deepening) occurred around 2006. As a first approximation, potential growth is set at 2.5 percent for the period before 2006 (the average growth rate in 1999–2005) and 4 percent since (the average growth calculated with the production function approach). An open question (that can only be answered in probabilistic terms and, with confidence, only after a few years) is whether the GDP contraction in 2009–10 represents a switch to the low growth regime or a tail (low probability) event in the high growth regime.[3] Given the projected short duration of the downturn in the staff projections, it would not be unreasonable to assume that the economy remains in the high growth regime.

The RS methodology suggests:

- **A constant potential growth.** The higher actual than potential growth over the medium term (2012–15) ensures that the output gap is closed by the end of the projection period.
- **A positive output gap of 3 percent in 2009 and a narrower, compared to the HP methodology, negative gap of 2½ percent in 2010.**The difference mirrors HP's overestimation of potential GDP in 2006. Correspondingly, RS suggests the widening of the positive output gap in 2008 to 15 percent, compared to 10 percent in the case of the HP filter.

[3] The first case implies that the current recession has no permanent impact on GDP and, eventually, the economy evolves along the pre-recession growth path. The second case, on the other hand, implies a downward shift in the growth path and, hence, a permanent output loss.

Potential growth rates
(Period averages, in percent)

	2006-08	2009-11	2012-15
Regime Switch	3.9	4.0	4.0
HP-20	4.1	2.8	3.9
HP-100	3.9	3.4	3.7
Actual growth	8.7	-1.4	4.3

Source: IMF staff estimates.

Output gap estimates
(Period averages, in percent)

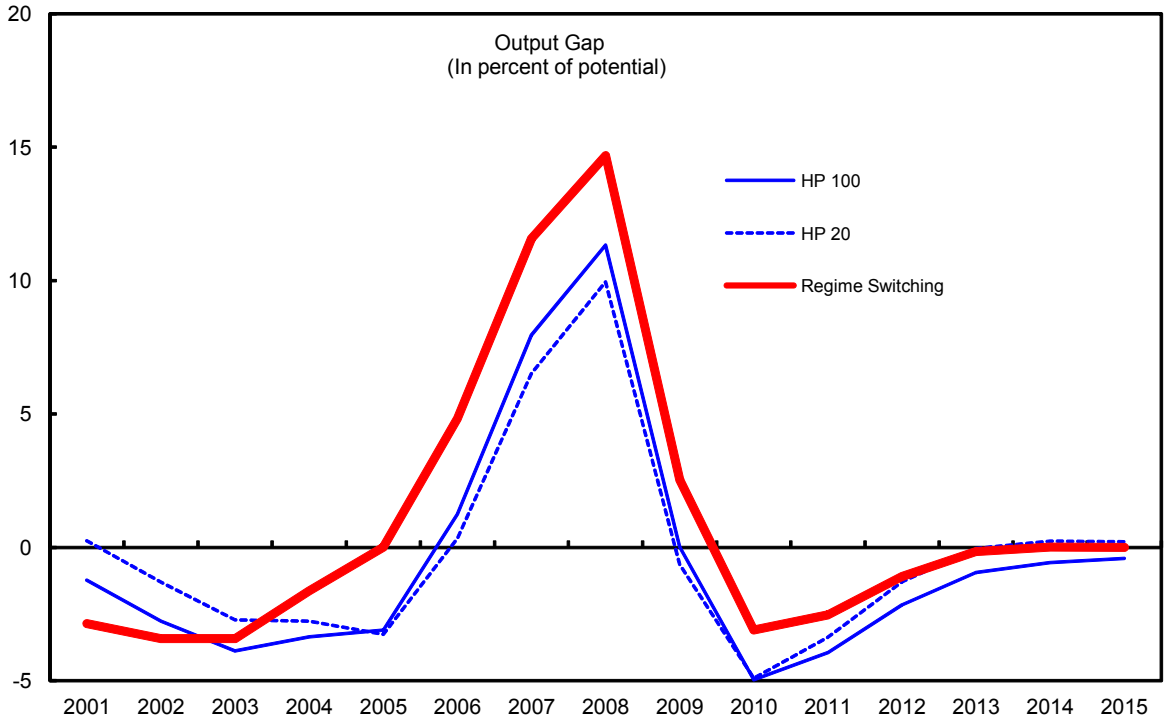
	2006-08	2009-11	2012-15
Regime Switch	10.4	-2.2	0.0
HP-20	5.4	-3.2	0.2
HP-100	6.4	-3.9	-0.7

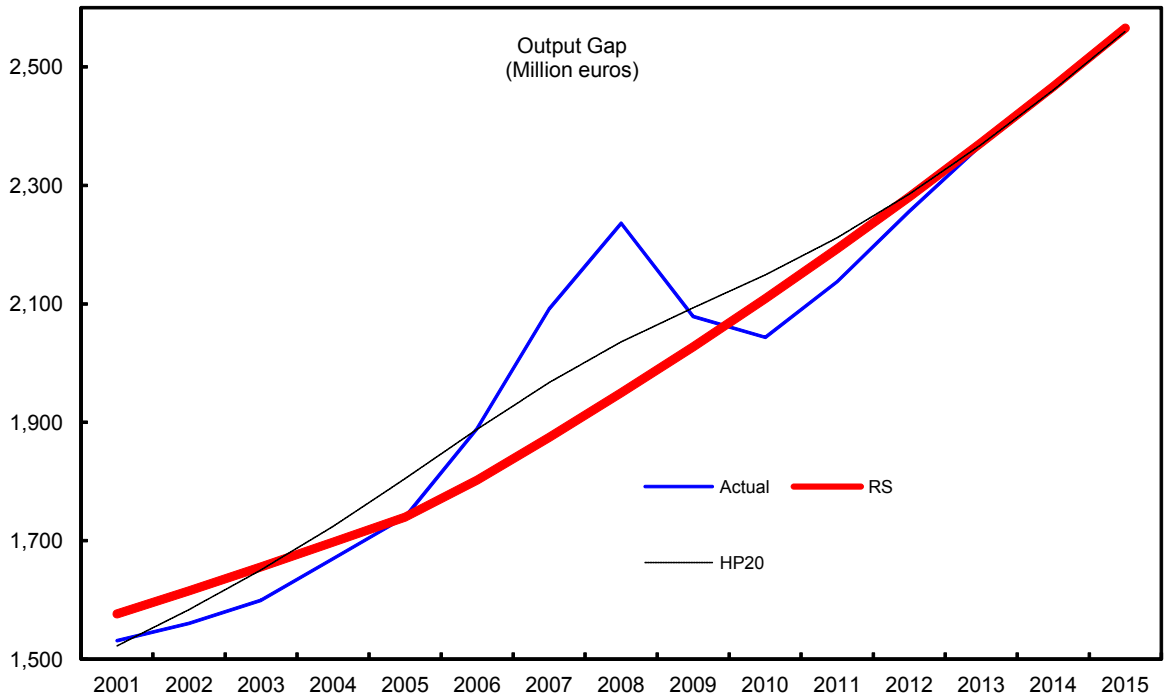
Source: IMF staff estimates.

There is a subtle difference between the HP and RS estimates of potential GDP. The former suggests that the recession will cause a permanent GDP loss, which is reflected in the downward shift of trend GDP. The latter implies no output losses, as trend GDP remains unchanged.

A key question with important policy ramifications concerns the most appropriate estimate of potential GDP for calculating the structural fiscal balance. The preceding analysis suggests that in the near term RS has the advantage of being less affected by transitory shocks. In the medium term, however, both methodologies suggest roughly the same level of potential GDP and a zero output gap and, as a result, lead to the same medium-term assessment of the structural fiscal balance.

Montenegro: Output Gap and its Determinants, 2001–15





Sources: Monstat and IMF staff calculations.

Annex III. Estimating the Structural Fiscal Balance in Montenegro[1]

Alternative methodologies are used to estimate the structural fiscal balance in Montenegro. While the estimates are subject to considerable uncertainty and handicapped by short time series and data quality problems, they all point to the presence of a large structural deficit which in turn reflects the fundamental inconsistency between low tax rates and a large size of the government.

A. Background

The fiscal balance is subject to a multitude of transitory factors that complicate the assessment of the structural fiscal position. There are three broad groups of factors that create a wedge between the actual and the structural balance: cyclical, transitory and accounting. The business cycle is positively related with revenue and negatively with some expenditure, and these automatic stabilizers result in a more favorable fiscal position during periods of strong economic performance. Transitory factors (for example, asset booms and one-off events) and accounting practices (for example, the treatment of arrears and contingent liabilities) can also distort the underlying fiscal situation. The conventional approach is to calculate the structural balance by subtracting the impact of these factors from the headline balance using the output gap as a proxy for the cyclical position.

A complication in the case of Montenegro is that the output gap is subject to significant uncertainty and is not a sufficient statistic of the cyclical position of the economy (Annex 2). Separating the cycle from the trend is complicated in transition economies, which are subject to low frequency (permanent) shocks, and this complication is compounded by the lack of observations for a full business cycle and the elevated uncertainty surrounding real time estimates of the output gap. In addition, the output gap does not capture adequately the imbalances in the economy and in particular, the excess of spending over production. In 2009 the output gap was practically closed which, other things being equal, would imply that the structural and actual fiscal balances coincide. At the same time, imports (and consumption and indirect taxes) remained well above their "normal" level suggesting a large cyclical component. Thus, using the output gap as the only proxy for the cycle distorts the cyclical component of the fiscal balance.

This annex constructs alternative estimates of the structural fiscal balance. In addition to the standard methodology, which is based solely on the output gap, an augmented methodology is presented that uses two gaps: the gap between actual and "normal" imports as a proxy for the transitory component of the tax base for indirect taxes (mainly VAT) and

[1] Prepared by Javier Kapsoli.

the output gap for the rest items in the budget.[2] Moreover, alternative output gap estimates are used to gauge the robustness of the structural balance. The next section discusses the standard approach, section C, discuses the augmented methodology and section D concludes with a sensitivity analysis.

B. The Standard Approach of Estimating the Structural Fiscal Balance

The standard approach uses the output gap to eliminate the cyclical component from revenues and expenditure. While the relationship between revenues and the economic cycle is fairly straightforward, it is not the same in the case of expenditures.

- When the economy is growing, profits and income tax are up. Moreover, strong consumption boosts revenue from VAT and excise taxes; it also boosts imports and taxes related to international trade. If there is a real estate boom, real estate taxes and property taxes also rise above their normal level.
- The relationship of expenditures with the business cycle is not clear cut. The typical correction used in Fund analyses is applied to unemployment benefits (see Hagemann, 1999). If this is the case, expenditures will be corrected by the ratio between actual and natural (NAIRU)[3] unemployment rate. Although Montenegro has some expenditures linked to employment, these are negligible compared to total expenditures.[4] Therefore, this analysis considers all expenditures to be structural in nature, obviating the need for cyclical adjustments to expenditure.

Transitory shocks and measures need to be excluded from the structural balance. Though potentially controversial, this adjustment is in line with the consensus in the literature. The European Commission, for example, has established guidelines to limit discretion in the calculation of one-off adjustments (EC, 2006). According to these guidelines, to be considered as one-off, a measure must: (i) have a significant impact in the budget (at least 0.1 percent of GDP), (ii) have a limited temporary impact and (iii) be nonrecurrent. In Montenegro, the €44 million loan to *Prva* bank—that was included as budgetary net lending in 2008, and reversed in 2009—is considered to be one-off.

[2] This is somewhat related to a Keynesian view of the economy where output could move for long periods driven by demand fluctuations that work on top of the neoclassical factors stressed in the production-function determination of potential output (Scacciavillani & Swagel (2002) discuss this issue). The analysis here allows for the fact that demand pressures affect various taxes differently.

[3] Nonaccelerating inflation rate of unemployment, defined as the unemployment rate consistent with full employment general equilibrium.

[4] Transfers related to the employment fund are only 4% of total transfers.

The standard approach to estimating the structural balance requires estimation of the output gap and the elasticity of revenues and expenditures with respect to the output gap. Starting point is the definition of the structural balance

(1) BS = RS – E

where BS and RS denote respectively the structural balance and revenues and E stands for expenditures net of one-off items. The structural revenues are defined as:[5]

$$(2)\quad RS = \left(\frac{Y_P}{Y}\right)^{\in} R$$

where Y and Y_P denote actual and potential output, R stands for total revenues and $\in$ is the elasticity of revenue with respect to the output gap. Using (2) in (1) and, expressing all terms as a percent of potential output:[6]

$$(3)\quad \frac{BS}{Y_P} = \left(\frac{Y_P}{Y}\right)^{\in}\left(\frac{R}{Y_P}\right) - \frac{E}{Y_P}$$

Subtracting interest payments, the primary structural balance is:

$$(4)\quad \frac{PBS}{Y_P} = \left(\frac{Y_P}{Y}\right)^{\in}\left(\frac{R}{Y_P}\right) - \frac{E}{Y_P} - \frac{INT}{Y_P}$$

The fiscal impulse (a measure of the impact of the budget to aggregate demand) is then defined as the change in the structural primary balance:

$$(5)\quad FI = -\left\{\frac{PBS}{Y_P} - \frac{PBS}{Y_P}(t-1)\right\}$$

The elasticity of revenues with respect to output is close to unity. While annual data since 2001 and 2006 weights suggest an elasticity of 1.12, this is essentially because of the import boom. Since this is adjusted for separately, a unitary elasticity with respect to potential output is subsequently assumed. In view of this and to avoid unnecessary complications, the ensuing calculations assume unit elasticity.

[5] To simplify, lagged effects of the cyclical output gap on the budget (see Hagemann, op. cit. for a complete version of the model) are not included.

[6] For a discussion of the appropriate scaling variable, see Fedelino, et al. (2009)

Given the uncertainty surrounding the measurement of potential output, alternative estimates are used in the calculations. As discussed in Annex 2, the popular Hodrick-Prescott filter is not reliable for economies that are taking off after a long period of stagnation. For completeness it is used in the calculations, but greater reliance is given in a simple regime-switching model that postulates two states, a "*low growth*" and a "*high growth*" state.

The standard methodology suggests a sudden deterioration of the structural balance in 2008, largely caused by an increase in expenditures. The calculations show a significant deterioration in the structural balance during the economic boom. A period of structural surpluses ended in 2008. This is basically explained by the sharp increase in recurrent expenditures, in particular, wages and pensions, and cuts in income tax rates and contributions to the pension and health funds.

Montenegro: Standard Structural Fiscal Balance 2004–10
(In percent of potential GDP)

	2004	2005	2006	2007	2008	2009 Prel.	2010 Proj.
Revenue	37.4	36.8	43.4	47.7	48.6	43.2	41.8
Expenditure	39.8	38.2	40.4	40.9	48.8	46.4	48.9
Fiscal balance	-2.4	-1.4	3.0	6.7	-0.3	-3.2	-7.1
Cyclically adjusted primary balance	-0.3	-0.3	2.2	3.2	-6.5	-3.5	-4.5
Other adjustments	0.0	0.0	0.0	0.0	1.6	-2.8	0.0
Interest payments	1.5	1.1	1.2	1.2	0.9	0.9	1.1
Structural balance	-1.8	-1.4	1.0	2.0	-5.8	-7.2	-5.6
Memorandum							
Fiscal impulse	…	0.0	-2.5	-1.0	8.1	1.4	-1.8
Output gap	-1.6	0.0	4.8	11.6	14.7	2.5	-3.1

Source: Ministry of Finance and IMF staff estimates.

The standard methodology of estimating the structural balance could have important shortcomings when applied to episodes characterized by an absorption boom. As noticed in IMF (2007), during absorption booms, domestic demand grows much faster than production, resulting in temporary import and current account deficit surges and an associated revenue windfall, especially from indirect taxes related to consumption (VAT and excise) and imports (tariffs and duties). This effect is not correctly captured with the standard methodology that adjusts only for the output gap and not for the external imbalance, which is underlying the absorption boom.

This shortcoming is especially relevant for Montenegro where almost two thirds of total revenues come from indirect taxes, and where the economic boom was led by runaway absorption. During the boom years 2006–07 VAT grew at 40 percent annually, reflecting surging consumption and domestic demand, as absorption on average rose to 130 percent of GDP (2006–08) from some 100 percent of GDP in the previous period.

Montenegro: Composition of Revenues
(in percent)

	2006	2007	2008	2009	Average
Taxes	81.5	78.2	89.5	88.3	84.4
Direct taxes	20.5	20.2	21.0	20.0	20.5
Indirect taxes	61.0	58.0	68.4	68.3	63.9
Nontax revenue	18.5	21.8	10.5	11.7	15.6
Total	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance.

C. An Augmented Methodology of Estimating the Structural Fiscal Balance

A more refined methodology of estimating the structural fiscal balance considers separately the effects of internal and external imbalances. For this, total revenues are split between indirect taxes and other revenues. Structural indirect taxes are related to the deviation of actual imports from normal imports while other structural revenues are explained by the output gap:

(6) $R = RI + RD$

(7) $RS = RIS + RDS$

(8) $$RIS = \left(\frac{M_P}{M}\right)^{\in 1} RI$$

(9) $$RDS = \left(\frac{Y_P}{Y}\right)^{\in 2} RD$$

where RI are indirect taxes, RD are other revenues, M are imports, M_P is "normal" level of imports and $\in 1$ and $\in 2$ are income elasticities of indirect and other taxes, respectively.

Implementing this methodology poses the challenge to estimate the "normal" level of imports. Imports soared in the past few years as a result of the demand-led boom and the opening up of the country. The short observation period and the confluence of these two shocks make it difficult to identify statistically the trend from the temporary effect. This will be possible with confidence only when the transitory effects unwind. However, using as a benchmark the experience of other countries one can assume that "normal" imports will permanently increase and then taper off.[7]

[7] An alternative approach used in IMF (2007) adjusts for the absorption gap that is defined as the difference between the actual current account balance and the current account norm. However, this imposes the additional

(continued)

The augmented methodology results in a larger structural fiscal deterioration. The structural fiscal balance in percent of potential GDP is now given by:

$$\frac{BS}{Y_P} = \left(\frac{Y_P}{Y}\right)^{\epsilon 2}\left(\frac{RD}{Y_P}\right) + \left(\frac{M_P}{M}\right)^{\epsilon 1}\left(\frac{RI}{Y_P}\right) - \frac{E}{Y_P}$$

The calculations, based on unit elasticities, imply a higher structural fiscal deficit than in the standard approach; and a structural deficit for several years, even during years in which the standard approach suggests a structural surplus. The deficits are more consistent with the fiscal relaxation that hit a peak with the 2008 stimulus package.

Montenegro: Alternative Structural Fiscal Balance Estimation 2004–10
(In percent of potential GDP)

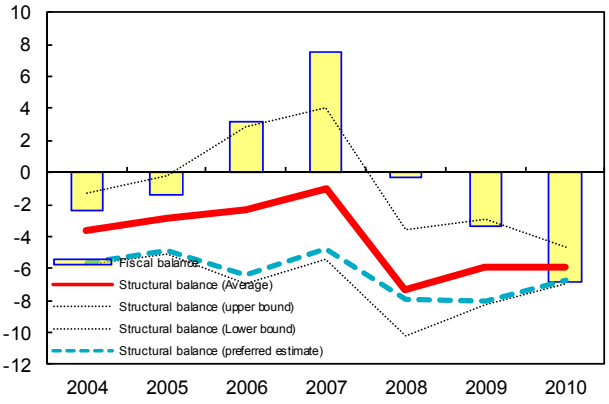
	2004	2005	2006	2007	2008 Prel.	2009 Prel.	2010 Proj.
Fiscal balance	-2.4	-1.4	3.0	6.7	-0.3	-3.2	-7.1
Cyclically adjusted primary balance	-4.1	-3.7	-5.3	-3.6	-8.7	-4.4	-5.6
Other adjustments	0.0	0.0	0.0	0.0	1.6	-2.8	0.0
Interest payments	1.5	1.1	1.2	1.2	0.9	0.9	1.1
Structural balance	-5.7	-4.9	-6.4	-4.8	-8.0	-8.1	-6.7
Memorandum							
Fiscal impulse	…	-0.4	1.6	-1.7	3.4	0.1	-1.6

Source: Ministry of Finance and IMF staff estimates.

D. Sensitivity Analysis

As described, the calculation of the structural fiscal balance involves a considerable degree of uncertainty. The methods presented here are basically restricted by Montenegro's limited data availability (partly reflecting its short history as an independent country). In the future, when the history gets longer and statistical quality improves, other estimation methods may be implemented and the precision of the measures may improve. In the meantime, and to give an idea of the range of the estimations, the

Actual and Structural Balance, 2004-10.



Sources: Ministry of Finance and Fund staff estimates.

challenge of identifying the current account norm, estimates of which tend to be heavily sensitive to identifying assumptions. Moreover, in Montenegro, current account data have in the past been significantly revised, imparting an additional uncertainty. The proposed adjusted based on imports steers largely clear of these uncertainties.

table below presents the results of the different methods and summarizes using a simple arithmetic mean.

Montenegro: Alternative Structural Fiscal Balance Estimation 2004–10
(In percent of GDP)

	2004	2005	2006	2007	2008	2009	2010
Classic method–HP filter	-1.3	-0.2	2.9	4.1	-5.1	-2.9	-4.7
Classic method–switching model	-1.8	-1.4	1.0	2.0	-5.8	-7.2	-5.6
Alternative method–HP filter	-5.8	-5.1	-7.0	-5.5	-8.7	-8.2	-6.9
Alternative method–switching model	-5.7	-4.9	-6.4	-4.8	-8.0	-8.1	-6.7
Average	-3.6	-2.9	-2.4	-1.0	-6.9	-6.6	-6.0

Source: IMF Staff estimates.

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Annex IV. Debt Sustainability Analysis[1]

Coverage

This debt sustainability analysis includes gross public debt that is recognized by the authorities and covers the general government.[2]

- Liabilities related to restitution are included. In 2004, the government issued a Law to tackle the problem of restitution of property seized or expropriated by the former communist government. Article 22 limits the annual payments under this program to 0.5 percent of GDP and the stock of total obligations potentially recognized to 10 percent of GDP. In 2009, the stock of liabilities of this program was €100 million and the legal medium term cap €400 million.

- In 2009 the remaining stock of arrears with pensioners was €48.5 million.

- Under the legal framework, the government is to compensate savers whose savings were confiscated during the Milosevic government. The total amount for this obligation (old foreign exchange savings) is now €108 million.

- Debt of municipal governments is estimated at €62 million.

- On the external side, negotiations related to debt inherited from the former Yugoslavia continue. These disputed obligations include credits from the governments of Libya, Kuwait, Czech Republic and Slovakia and API bonds issued within the London Club during the restructuring of debt and owned by UBS bank. According to estimation of the Montenegrin Ministry of Finance the total amount of these unresolved obligations could reach 1 percent of GDP.

- Debt from public enterprises is not included in this analysis as they are not part of the general government. At the end of 2009 total debt of public companies was €130 million or 4.4 percent of GDP.

- As of December 2009 deposits of the Ministry of Finance were €151.9 million (including gold's valuation of €29.6 million) and deposits of funds[3] were €44.9 million which brings the net debt to 32.1 percent of GDP.

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[1] Prepared by Javier Kapsoli.

[2] The actual coverage includes spending units under the Montenegrin republican budget, social funds (employment, health and pensions) and local governments.

[3] Funds here refer to the funds not fully integrated in the Treasury system: Pension, Health and Development Fund of Montenegro.

Results

Under the baseline scenario which reflects authorities' fiscal plans and measures, the gross debt-to-GDP ratio is projected to reach 56 percent of GDP in 2014. Although the baseline scenario is based on authorities' medium term fiscal plan that virtually freezes public expenditures to the level of 2009, the debt stock is shifted by compensation liabilities that are projected—in line with the debt dynamics published by the Ministry of Finance[4]—to reach 10 percent of GDP. Also, the scenario assumes the repayment of the remaining obligations to pensioners by 2011 and a substantive reduction in obligations related to old foreign currency savings, as around €14 million would be paid annually.

The financing requirement continues to grow as most of new credits will have short maturities. Interest expenditures are projected to reach some 3 percent of GDP as nonmarket debt is replaced by market debt. Privatization proceeds are expected to decline and gradually tend to zero.

The standard stress tests were performed using the methodology adopted in July 2005 (Information Note on Modifications to the Fund's Debt Sustainability Assessment Framework for Market Access Countries http://imf.org/external/np/pp/eng/2005/070105.htm) but with modifications due to data constraints. They exacerbate the near-term baseline trend of increasing debt. The stress tests also show that the public debt path is particularly sensitive to growth shocks and contingent liabilities.

[4] See Montenegro's Ministry of Finance '*Bulletin XVII*" (September 2009).

Montenegro: Public Sector Debt Sustainability Framework, 2005-2015
(In percent of GDP, unless otherwise indicated)

	Actual					Projections						
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Debt-stabilizing primary balance 9/
Baseline: Public sector debt 1/	38.6	32.6	27.5	29.0	38.8	44.0	49.2	51.9	53.8	55.6	55.0	-0.7
Change in public sector debt	-6.2	-6.0	-5.1	1.5	9.8	5.3	5.1	2.8	1.9	1.8	-0.6	
Identified debt-creating flows (4+7+12)	-10.4	-11.8	-17.2	-4.6	0.5	5.7	4.9	1.2	0.3	0.3	0.2	
Primary deficit	0.3	-4.1	-7.8	-0.5	2.4	6.0	6.3	4.0	2.7	1.8	0.9	
Revenue and grants	36.8	43.4	47.7	48.6	43.2	41.8	39.8	39.5	39.2	39.3	39.4	
Primary (noninterest) expenditure	37.1	39.3	39.9	48.1	45.6	47.7	46.1	43.5	41.9	41.1	40.3	
Automatic debt dynamics 2/	-2.4	-4.9	-5.4	-2.8	2.3	1.2	-1.4	-2.0	-1.6	-1.0	-0.7	
Contribution from interest rate/growth differential 3/	-2.4	-4.9	-5.4	-2.8	2.3	1.2	-1.4	-2.0	-1.6	-1.0	-0.7	
Of which contribution from real interest rate	-0.7	-2.1	-2.6	-1.2	0.1	0.6	0.5	0.5	0.8	1.1	1.4	
Of which contribution from real GDP growth	-1.7	-2.8	-2.8	-1.6	2.1	0.7	-1.9	-2.5	-2.4	-2.1	-2.1	
Contribution from exchange rate depreciation 4/	0.0	0.0	0.0	0.0	0.0	...	...	...	...	...	...	
Other identified debt-creating flows	-8.2	-2.8	-4.0	-1.2	-4.2	-1.5	0.0	-0.9	-0.8	-0.5	0.0	
Privatization receipts (negative)	-8.2	-2.8	-4.0	-1.2	-4.2	-1.5	-1.0	-0.9	-0.8	-0.5	0.0	
Recognition of implicit or contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes (2-3) 5/	4.2	5.8	12.1	6.1	9.3	-0.4	0.2	1.6	1.6	1.5	-0.8	
Public sector debt-to-revenue ratio 1/	104.9	75.1	57.7	59.7	89.7	105.4	123.5	131.5	137.4	141.6	139.7	
Gross financing need 6/	6.0	-0.6	-3.0	2.2	7.4	11.8	11.8	11.0	11.0	12.0	12.1	
in billions of U.S. dollars	0.1	0.0	-0.1	0.1	0.3	0.5	0.5	0.5	0.6	0.6	0.7	
Scenario with key variables at their historical averages 7/						44.0	40.5	37.6	35.0	32.8	28.9	-2.0
Scenario with no policy change (constant primary balance) in 2010-2015						44.0	48.8	53.5	58.6	64.4	68.7	-0.9
Key Macroeconomic and Fiscal Assumptions Underlying Baseline												
Real GDP growth (in percent)	4.2	8.6	10.7	6.9	-7.0	-1.7	4.6	5.5	5.0	4.2	4.0	
Average nominal interest rate on public debt (in percent) 8/	2.8	3.4	4.0	3.2	2.8	2.9	3.2	3.7	4.3	4.8	5.2	
Average real interest rate (nominal rate minus change in GDP deflator, in percent)	-1.6	-5.6	-8.7	-4.5	0.3	1.4	1.3	1.3	1.8	2.3	2.7	
Nominal appreciation (increase in US dollar value of local currency, in percent)	-13.4	11.6	11.8	-7.5	3.7	...	...	...	...	...	...	
Inflation rate (GDP deflator, in percent)	4.3	9.0	12.7	7.7	2.5	1.5	1.9	2.5	2.5	2.5	2.5	
Growth of real primary spending (deflated by GDP deflator, in percent)	0.8	15.3	12.2	28.8	-11.8	2.9	0.9	-0.2	1.0	2.2	2.0	
Primary deficit	0.3	-4.1	-7.8	-0.5	2.4	6.0	6.3	4.0	2.7	1.8	0.9	

Source: IMF Staff estimates.

1/ Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.

2/ Derived as $[(r - \pi(1+g) - g + \alpha\varepsilon(1+r)]/(1+g+\pi+g\pi))$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; α = share of foreign-currency denominated debt; and ε = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

3/ The real interest rate contribution is derived from the denominator in footnote 2/ as $r - \pi (1+g)$ and the real growth contribution as -g.

4/ The exchange rate contribution is derived from the numerator in footnote 2/ as $\alpha\varepsilon(1+r)$.

5/ For projections, this line includes exchange rate changes.

6/ Defined as public sector deficit, plus amortization of medium and long-term public sector debt, plus short-term debt at end of previous period.

7/ The key variables include real GDP growth; real interest rate; and primary balance in percent of GDP.

8/ Derived as nominal interest expenditure divided by previous period debt stock.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.