# Icelandic Economic Update Arion Research



### Treasury accounts 2012: Deficit shrinks to 2.1% of GDP

• The 2012 Treasury accounts were released mid-July, posting an overall deficit of 36 bn. ISK, roughly 2.1% of GDP, and the first primary surplus since the financial crisis (originally planned for 2011). In our view, the numbers are yet another sign of the recovery of the Icelandic economy, although they underline the challenges that still lie ahead.

# Deterioration in the fiscal outlook: That bad, huh?

• The leaders of the new coalition government hosted a press conference earlier this summer to announce deterioration in the fiscal outlook. Shortly after, S&P's revised its ratings outlook for Iceland downward on worries over fiscal risks due to the government's costly campaign platforms, and the IMF has now joined in to voice its concerns over fiscal slippages. But how bad is the fiscal outlook, how committed to fiscal consolidation is the new government and how big of a threat do the governments electoral promises really pose to fiscal sustainability?

#### Austerity in Iceland: The curious case of the missing multipliers

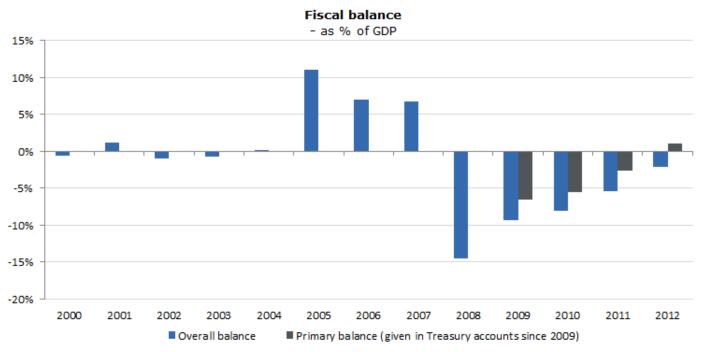
• A concept rarely used since the demise of the Keynesian revolution during the 1970s reentered the global policy debate with a vengeance in the wake the financial crisis of 2008. Yep, you guessed it. We're referring, of course, to the so called fiscal multiplier; a single digit describing the approximate response of output to exogenous discretionary changes in fiscal policy, thereby drawing the line between successful austerity measures and counterproductive ones. While most countries are debating how much their multipliers have risen, data from Iceland almost begs the question whether they've gone missing.



# Treasury accounts 2012: Deficit shrinks to 2.1% of GDP

The 2012 Treasury accounts were released mid-July<sup>1</sup>, posting an overall deficit of 36 bn. ISK, roughly 2.1% of GDP, and the first primary surplus since the financial crisis (originally planned for 2011). In our view, the numbers are yet another sign of the recovery of the Icelandic economy, although they underline the challenges that still lie ahead.

On the positive side, although the fiscal budget is still in deficit, there is a substantial recovery from 2011, with the overall deficit shrinking from 5.5% of GDP to just over 2% between years. The primary balance improved from a deficit of 2.6% of GDP to a *surplus* of just over 1%, marking a milestone in the country's fiscal recovery. A positive overall balance is still planned for 2014 as far as we know<sup>2</sup>, and while there is obviously still some way to go to tip it into surplus, we're hopeful that the new government will continue with fiscal consolidation as necessary as we discuss in our note on the fiscal outlook.



Source: Treasury Accounts

Central government debt grew by almost 50 bn. ISK in nominal terms during the year, from 1,840 bn. to 1,890 bn., although the debt-to-GDP ratio fell from 113% to 111% - the first drop it has seen since the eve of the financial crisis. Although this is clearly a step in the right direction, there's still a long way to go. Owing more than an entire year's GDP is no picnic for any country. This holds especially true when almost 15% of the fiscal budget each year is going towards interest and debt servicing costs, rather than providing public services.

We therefore believe that reducing government debt should be a priority going forward, as it clearly poses one of the biggest challenges to the continuing recovery. Like we've pointed out before, the downward trajectory of government debt is pretty robust to a range of shocks, according to the IMF's view, as long as politicians stick to their guns in following through with necessary fiscal adjustments in the coming years<sup>3</sup>.

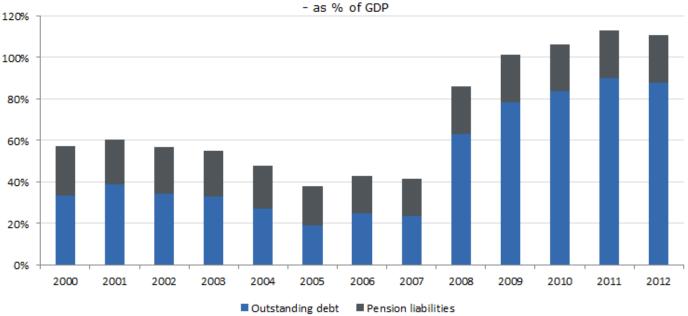
<sup>&</sup>lt;sup>1</sup> See <u>Treasury accounts 2012</u>.

<sup>&</sup>lt;sup>2</sup> See <u>2013 – Fiscal budget information</u>.

<sup>&</sup>lt;sup>3</sup> See latest <u>Article IV Consultation</u>.



### Central government debt

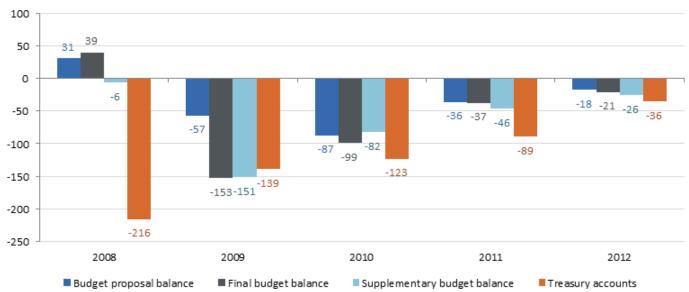


Source: Treasury Accounts

Despite these positive signs in the treasury accounts, news of the deficit were met with a fair degree of cynicism in Iceland - mostly since it was quite a bit larger than the budget and its supplements had anticipated, much like in previous years.

This was due to both revenue and expenditure missing their marks. Revenue was 3.4 bn. less than expected (0.6% deviation) while expenditure was 6.6 bn. more (1.2% deviation). It's important to note, however, that the negative expenditure deviation was almost solely due to accounting procedures, as the book value of the Treasury's holding in the Housing Financing Fund was written down by 7 bn. ISK, and pension liabilities grew more than expected. The government's regular operations were, however, broadly on track, with expenditure actually staying within target on cash basis.

The fiscal balance: From budget proposal to treasury accounts since the crisis - bn. ISK



Source: Treasury Accounts

While the HFF's dire financial situation is obviously going to weigh down on the fiscal balance in coming years, just as it has in the past, the write down was hardly unexpected. The main worry is the degree of debt the government will have to take on to finance further equity injections. Whether these injections are capitalized or charged on the government's books is a bit beside the point.

# **Deterioration in the fiscal outlook: That bad, huh?**

The leaders of the new coalition government hosted a press conference<sup>4</sup> earlier this summer to announce deterioration in the fiscal outlook, which they expect to cause slippages of up to 14 bn. ISK (0.8% of GDP) from the 2013 budget target. They cited weaker outcomes on both the revenue and expenditure side, driven by an array of factors: Expenditure overruns "in certain policy areas", less dividend and asset sale receipts than budgeted as well as slower than projected growth, with some of these risks expected to cause slippages in 2014 as well if nothing were to be done. In addition, the government has already given up sizable chunks of revenue (roughly 4 bn. ISK in 2013, and 8 bn. ISK annually in the following years) due to tax cuts for fisheries and the tourism industry. Concerns for these factors, as well as the costly promises made by the parties during the recent election campaign, are echoed in the latest IMF Article IV Consultation<sup>5</sup>, with a further weakening of fiscal consolidation considered a likely source of risk in the next 1-3 years.

We're a bit puzzled by all of this, seeing as how the Treasury's cash flow is quite more favorable than expected in the first half of the year<sup>6</sup> – its cash from operating activities is negative by 12.4 bn. ISK, compared with a budgeted deficit of 25.8 bn. ISK for the period. In addition, revenue is 0.2% higher than expected, while expenditure is 3.1% within target. In other words, it has to be one heck of a second half of the year to cause these slippages to fully materialize.

Although that still might come to be the case, we wouldn't dismiss the possibility that the aim of painting such a grim picture of the fiscal outlook was to manage voter expectations, seeing as how both parties made quite costly electoral promises (including further tax breaks and household debt forgiveness), which might prove difficult for them to fully honor. Government finances being in worse shape than originally thought make a rather convenient excuse for reneging on some of these promises. It should be noted, though, that international ratings agency S&P's has already revised the rating outlook for Iceland downwards on worries that the authorities will in fact keep their word to voters up to the point of financing universal debt forgiveness by issuing new debt<sup>7</sup>.

Even so, the coalition leaders' rhetoric doesn't imply anything other than a continued commitment to responsible government finances, despite their seemingly costly campaign platforms. The aforementioned press conference ended with them reiterating the need for further austerity measures to bring the budget into surplus and bring down debt levels. In talks with the IMF during the Fund's latest visit, authorities apparently further signaled that "[...] they would consider rolling back some initiatives implemented by the previous government and identify new measures" to meet their target of a balanced budget in 2014 in spite of apparent challenges. The government has even assembled an austerity task force of coalition MP's with a mandate for making recommendations on sustainable and efficient reductions in government expenditure.

We therefore hope that even if the fiscal outlook has deteriorated and fiscal slippages will occur, like the leaders of the coalition insist, they will be quick to respond and get the deficit under control, so that previously stated budget targets are met. Especially since we're quite confident that austerity measures on the scale needed to reach a positive balance by 2014 will not have adverse effects on the economy up to the point of becoming counterproductive, like our thorough note on fiscal multipliers in Iceland explains below.

Even though we understand S&P's decision to revise the rating outlook for Iceland downwards due to the sheer uncertainty of how the authorities will implement their possible new set of policies, to our ears it doesn't quite sound like the new government is eager to take on piles of debt to pay for their promises. On the contrary, they seem rather set on austerity - although we can't know for certain before various special committees hand in their recommendations for household debt reduction this fall and the government presents its budget proposals.

Arion Research

<sup>&</sup>lt;sup>4</sup> See <u>slides from the conference</u> – only available in Icelandic.

<sup>&</sup>lt;sup>5</sup> See latest <u>Article IV Consultation</u>.

<sup>&</sup>lt;sup>6</sup> See Treasury Finances in English and Icelandic for further details.

<sup>&</sup>lt;sup>7</sup> See <u>S&P ratings revision</u>.



The prime ministers party has been quite consistent in that it's targeting domestic assets of foreign creditors of the failed banks to finance any debt forgiveness. Now, if that's the most productive use of those funds (e.g. when compared with lowering government debt, reducing the bloated money stock and reducing interest costs) or whether that's the best thing to do to build investor confidence in Iceland is entirely up for debate. But if the government stays smart, we hesitate to worry about its immediate effect on government finances and debt levels.

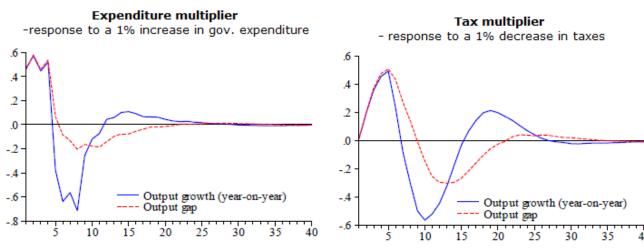
# Austerity in Iceland: The curious case of the missing multipliers

A concept rarely used since the demise of the Keynesian revolution during the 1970s re-entered the global policy debate with a vengeance in the wake the financial crisis of 2008. Yep, you guessed it. We're referring, of course, to the so called fiscal multiplier; a single digit describing the approximate response of output to exogenous discretionary changes in fiscal policy<sup>8</sup>. While the concept is simple enough to grasp, its exact measurement and implications have been the subject of much debate during the crisis.

The multiplier's comeback can be traced to a growing number of heavily indebted countries having to consolidate government finances by raising taxes and slashing expenditure. Now, if these austerity measures were to reduce debt by 1% of GDP, but caused GDP to fall by more than 1%, obviously the consolidation would be counterproductive as the debt ratio would rise - to name but one example of the multiplier's policy implications. Its importance for Iceland, a country with a debt-to-GDP ratio of 111% (counting pension liabilities) and further deficit reduction planned, is therefore substantial.

### How large are multipliers in Iceland? Some pre-crisis evidence

There's not really a wide variety of research on the topic of fiscal multipliers in Iceland. The Central Bank of Iceland's (CBI) quarterly macroeconomic model<sup>9</sup> predicts expenditure multipliers of up to 0.6 and tax multipliers between 0.3-0.5 within a year - which is to say that injecting one króna into the economy should increase output by 0.6 krónas, while lowering taxes by the same amount should increase output by 0.3-0.5 krónas (and vice versa when it comes to austerity).



Source: Central bank of Iceland

The expenditure multiplier is more or less in line with recent estimates of multipliers in European countries, as the table below indicates 10, although we think it rather high considering Iceland's small size and openness. Because of that, leakages of domestic demand from the Icelandic economy should be considerably higher than in most European countries due its higher propensity to import. The tax multiplier seems even higher in comparison as it is frequently negative in Europe.

<sup>&</sup>lt;sup>8</sup> For further info on the basics of the concept, we recommend a pretty concise position note written by IMF staffers in 2009, simply titled Fiscal Multipliers.

<sup>&</sup>lt;sup>9</sup> See pages 104-107 in the QMM Handbook for further discussion.

 $<sup>^{10}</sup>$  The table is from the <u>IMF Fiscal Monitor 2012/1</u>.



Table A1.1. First-Year Fiscal Multipliers: Summary of Findings from Previous Literature

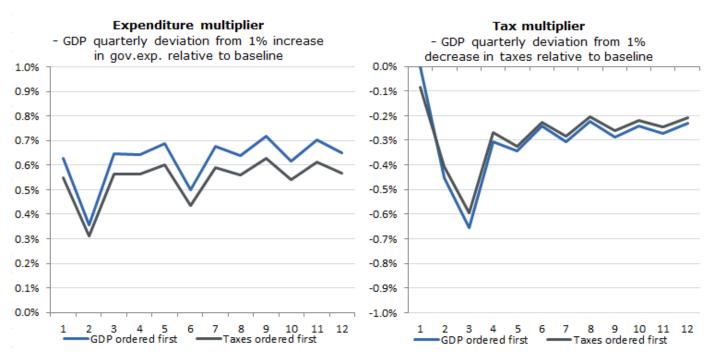
a. Size of Government Spending Fiscal Multipliers									
	All Samples		United States		Europe				
	VAR	DSGE	VAR	DSGE	VAR	DSGE			
Mean	0.9	0.7	1.0	0.7	0.8	0.6			
Median	0.8	0.6	0.9	0.7	0.6	0.5			
Mode	0.6	0.5	0.6	0.0	0.5	0.5			
Maximum	2.1	1.9	2.0	1.6	1.5	1.5			
Minimum	0.4	0.0	0.4	0.0	0.5	0.1			
b. Size of Government Revenue Fiscal Multipliers									
	All Samples		United States		Europe				

	All Samples		United States		Europe				
	VAR	DSGE	VAR	DSGE	VAR	DSGE			
Mean	0.2	0.3	0.7	0.3	-0.3	0.1			
Median	0.3	0.2	0.7	0.2	-0.3	0.1			
Mode	0.7	0.2	0.7	0.2		0.1			
Maximum	1.4	1.0	1.4	1.0	0.4	0.3			
Minimum	-1.5	0.0	-0.7	0.0	-1.5	0.0			

Source: Based on Baunsgaard and others (2012).

Note: VAR denotes summary statistics from linear vector autoregressive models, and DSGE denotes results from dynamic stochastic general equilibrium models. The summary statistics reflect results from 34 studies between 2002 and 2012 with large outliers excluded.

We conducted a study of our own to verify the findings of the CBI<sup>11</sup>. We also found an expenditure multiplier of roughly 0.6, while our tax multiplier was considerably lower than that of the CBI and more in line with previous European research, or roughly -0.3. The negative sign on the tax multiplier can either be due to a weakness in the estimation method, or due to a limited efficacy of tax policy – academics are still debating which.



Source: Arion Research calculations

<sup>&</sup>lt;sup>11</sup> We followed <u>Blanchard and Perotti</u> in defining our variables, and used their basic VAR structure to estimate the impulse response functions of GDP to fiscal shocks. We departed from their methodology in using Cholesky orthogonalization to identify the shocks, instead of imposing institutional restrictions on the contemporaneous relations of the error terms. We ordered expenditure first and estimated impulse response functions both ordering GDP and taxes second (see graph), with the choice of ordering hardly affecting the results at all. To further check the robustness of our results, we estimated a structural VAR model using B&P's output elasticities of tax bases, and our results more or less held. The expenditure multiplier was relatively unchanged, while the tax multiplier actually became positive but stayed small and insignificant.



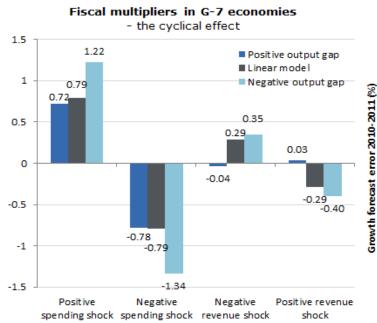
Apart from that, both our findings are in line with the limited consensus available; that expansionary or contractionary fiscal policy will affect the economy at a ratio of less than one-for-one in normal times, and that the expenditure side of the fiscal policy coin is more potent than its revenue side. Does that mean that austerity comes at a low cost to growth in the current environment?

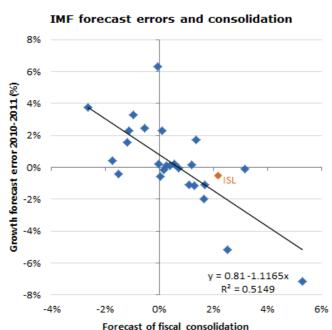
## Do multipliers grow larger in downturns?

There actually seems to be a growing consensus that linear estimates such as ours and the CBI's tend to overestimate multipliers during business cycle peaks, and underestimate them during troughs, i.e. that multipliers actually grow larger during economic downturns<sup>12</sup>. If this holds true for Iceland, there's a danger that austerity is more costly in terms of output than our estimates suggest.

The argument is a simple one. When there is excess capacity in the economy, unemployment runs high and interest rates are low, a case can hardly be made that government spending is displacing private spending. Therefore, austerity measures don't result in increasing private demand (i.e. crowding in effect) like they tend to do when the output gap is positive. Additionally, the proportion of liquidity/credit constrained firms and households is usually higher during slumps, which means that current disposable income and profits matter more for spending and investment than do expectations of future, or lifetime, income or profits – so fiscal policy affects them more rapidly and forcefully.

A number of recent studies have confirmed the notion that multipliers are dependent on the business cycle internationally, including two from the IMF that contradict the fund's earlier position that "fiscal multipliers are found to be quite low, and sometimes even operate in the wrong direction<sup>13</sup>". IMF staffers published a paper revealing considerably larger multipliers in the G-7 economies during contractions than during expansions, <sup>14</sup> while the Fund's chief economist noticed an error in the Fund's growth forecast in 2010-2011, systematically correlated with planned fiscal consolidation during the same period. This has led him to believe that the average 0.5 fiscal multiplier used by Fund analysts to forecast growth was probably underestimated by roughly 1.<sup>15</sup> These results are highlighted in the graphs below.





Source: IMF

<sup>&</sup>lt;sup>12</sup> A range of recent papers has explored cyclical differences in multipliers. We reccomend <u>Growth Forecast Errors and Fiscal</u> <u>Multipliers</u>, Fiscal Multipliers and the State of the Economy and Measuring the Output Responses to Fiscal Policy to name a few.

<sup>13</sup> See foreword to the Fund's October 2008 WEO.

 $<sup>^{14}</sup>$  The results were featured prominently in the <u>IMF Fiscal Monitor 2012/1</u>, see Appendix 1.

<sup>&</sup>lt;sup>15</sup> See Box 1.1. in the Fund's October 2012 WEO.



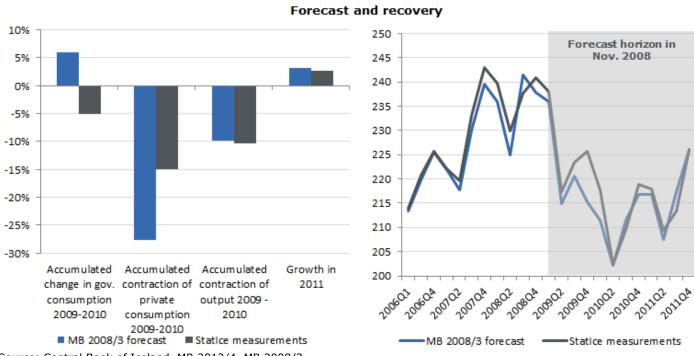
## So how large are fiscal multipliers in Iceland given current conditions?

The CBI's chief economist recently pointed out the obvious in the above picture; <sup>16</sup> that despite the comparatively large consolidation planned for Iceland in 2010, the Fund's growth forecast barely missed its mark – indicating that multipliers probably weren't underestimated for the country.

A similar case can be made by looking at the CBI's recently published comparison of Icelandic post-crisis economic developments and the Bank's forecasts. As the graph below shows, its November 2008 growth forecast was almost exactly on target, both in terms of the contraction and recovery, which should indicate right off the bat that it's highly unlikely that the Bank misestimated the country's fiscal multipliers. Now here's where things get interesting.

At the time, the Bank hadn't accounted for any contraction in government consumption, so its forecast actually incorporated modest growth in government outlays, mostly due to automatic stabilizers. In reality, the government ended up slashing consumption by 5%, which, if multipliers were at all present, should have resulted in a huge negative growth forecast error. It didn't at all. The unexpected drop in government consumption was more or less offset by a less than expected contraction in private consumption.

This leads us to believe that fiscal multipliers were not underestimated prior to the crisis, and a more appropriate question than if they've risen is whether they've gone missing.



Source: Central Bank of Iceland, MB 2012/4, MB 2008/3

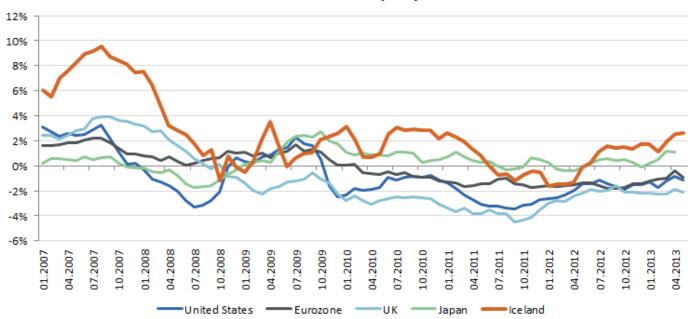
But what can possibly explain this curious case of missing multipliers? The CBI's chief economist names a few possible explanations, the first being that the policy rate in Iceland has yet to reach the zero lower bound, thereby giving the Bank the possibility of counteracting fiscal contraction with an expansionary monetary policy. We don't think this is the appropriate explanation thus far, since the CBI has hardly been more accommodative than its counterparts in countries where multipliers have supposedly gone up.

<sup>&</sup>lt;sup>16</sup> See slides to <u>Nexus between monetary and fiscal policy</u>.

<sup>&</sup>lt;sup>17</sup> See Box I-1 in the CBI's Monetary Bulletin 2012/4.

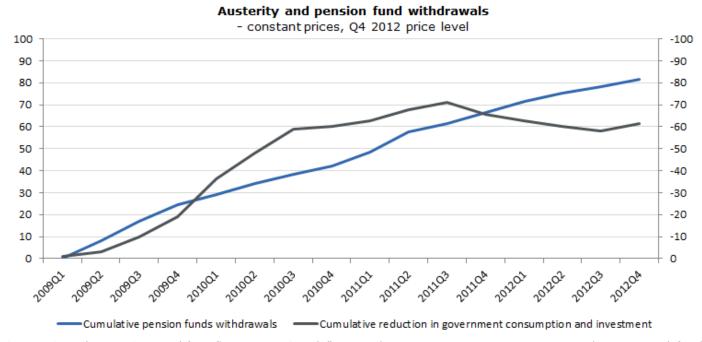


### Central banks' real policy rate



Source: Central Bank of Iceland

Another thing he points out is the substantial withdrawals from third pillar pension funds authorized by authorities following the onset of the crisis as well as debt write-offs that could've provided ample demand stimulus in the private sector, thereby reducing the adverse effects of austerity measures. A casual observation of the numbers involved corroborates this explanation, as the withdrawals almost exactly offset the reduction in government consumption and investment.



Source: QMM dataset. Corrected for inflation using GDP deflator. Reduction in government consumption and investment defined as change on same quarter in previous year.



#### **Conclusions**

We believe that fiscal multipliers are probably in line with previous estimates (less than 0.3-0.6, depending on whether austerity measures are applied on the expenditure or revenue side) and haven't increased during the recent crisis. If anything, stimulus measures have caused it to decrease.

If pension fund withdrawals, debt restructuring and other measures targeted at maintaining private demand continue offsetting austerity measures, we believe there's a relatively slim chance that austerity measures will prove to be counteractive – in the long run, they're more likely to aid the recovery by increasing confidence and reducing risks to capital account liberalization. In addition, the CBI still has considerable wiggle-room to slash interest rates and offset possible adverse effects of austerity to output.

On the other hand, if authorities foresee a slowdown in these stimulus measures, they should consider treading lightly when cutting the next budget.



# **Contacts**

#### Ásdís Kristjánsdóttir

Head of Research Research, Investment Banking Tel: +354 444 6968 asdis.kristjansdottir@arionbanki.is

## Stefán Guðjónsson

Senior Analyst Research, Investment Banking Tel: +354 444 6959 stefan.gudjonsson@arionbanki.is

#### **Hafsteinn Hauksson**

Analyst Research, Investment Banking Tel: +354 444 6993 hafsteinn.hauksson@arionbanki.is

#### **Fannar Jónsson**

Analyst Research, Investment Banking Tel: +354 444 6962 fannar.jonsson@arionbanki.is

#### **Provisional release:**

The content of this release has been prepared by the Research Division of Arion Bank hf. The Research Division bases its information on data information services and news services, both foreign and domestic, which it considers reliable, along with its own interpretations and evaluations of public information. Arion Bank hf. accepts no responsibility for the accuracy of this information nor any liability for transactions based on this information. In relation to this it should be noted that any of the Research Division's discussion may be an abridged version of more extensive analysis and research and conditions of financial markets change rapidly. For these reasons the recommendations and forecasts of the Research Division can change without notice, but they do reflect the opinions of the Research Division's employees at the time that they are expressed. Those parties who are interested in initiating transactions are advised to contact an expert at Arion Bank hf. before any decision is made. It should also be noted that Arion Bank hf., its employees and other parties associated with the Bank may have vested interests concerning particular organizations, which the Research Division's published material may pertain to at any given time.