Revising the multipliers and revising the forecasts — From talk to action?

By Bruno Ducoudré

Following on the heels of the IMF and the European Commission (EC), the OECD has also recently made a downward revision in its forecast for GDP growth in the euro zone in 2012 (-0.4%, against -0.1% in April 2012) and in 2013 (0.1%, against 0.9% in April 2012). In its latest forecasting exercise, the OECD says it now shares with the other international institutions (the IMF [i] and EC [ii]) the idea that the multipliers are currently high in the euro zone [iii]: the simultaneous implementation of fiscal austerity throughout the euro zone while the economy is already in trouble, combined with a European Central Bank that has very little leeway to cut its key interest rate further, is increasing the impact of the ongoing fiscal consolidation on economic activity.

The revision of the positioning of the three institutions poses two questions:

- What are the main factors leading to the revision of the growth forecasts? Given the scale of the austerity measures being enacted in the euro zone, we can expect that the revised forecast of the fiscal impulses is a major determinant of the revisions to the growth forecasts. These revisions are, for example, the main factor explaining the OFCE's revisions to its growth forecasts for France in 2012.
- Is this change in discourse concretely reflected in an upward revision of the multipliers used in the forecasting exercises? These institutions do not generally specify the size of the multipliers used in

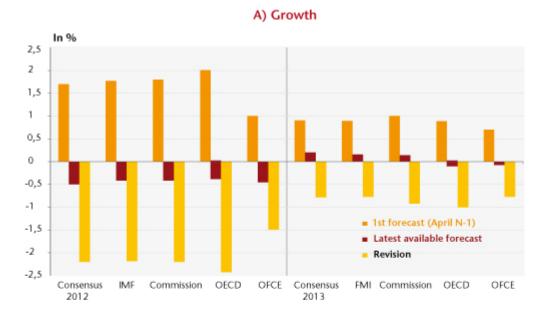
their forecasting. An analysis of the revisions to the forecasts for the euro zone in 2012 and 2013 can, however, tell us the extent to which the multipliers have been revised upwards.

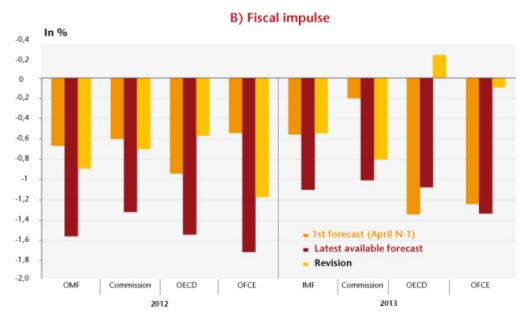
The following graph shows that between the forecast made in April of year N-1 for the euro zone and the latest available forecast for year N, the three institutions have revised their forecast sharply downward, by -2.3 points on average in 2012 and -0.9 point on average in 2013.

At the same time, the fiscal impulses have also been revised, from -0.6 GDP point for the OECD to -0.8 GDP point for the IMF for 2012, and by 0.8 point for the Commission to +0.2 point for the OECD in 2013, which explains some of the revisions in growth for these two years.

Comparatively speaking, for 2012 the OFCE is the institute that revised its growth forecast the least, but which changed its forecast for the fiscal impulse the most (-1.7 GDP points forecast in October 2012, against the forecast of -0.5 GDP point in April 2011, a revision of -1.2 points). In contrast, for 2013 the revision in the growth forecast is similar for all the institutions, but the revisions of the impulses are very different. These differences may thus arise in part from the revision of the multipliers.

Figure. Forecasts of growth and of the fiscal impulse for the euro zone*





^{*} For each of the two years, the first forecast is for April N-1. The latest forecast is the one for October / November 2012 (IMF, OFCE, OECD, European Commission) or September 2012 (Consensus Forecast).

The fiscal impulse is defined as the opposite of the change in the primary balance corrected for any cyclical variation. Sources: Consensus Forecast, IMF, European Commission, OECD, OFCE calculations and forecast October 2012.

The revisions of the growth forecasts \check{g} can be broken down into several terms:

- $extbf{■}$ A revision in the fiscal impulse IB, denoted $extit{Δ}IB$;
- A revision in the multiplier k, denoted Δk , k_{θ} being the initial multiplier and k_{τ} the revised multiplier;
- - A revision of the spontaneous growth in the euro zone

(excluding the impact of fiscal policy), of fiscal impulses outside the euro zone, etc.: Δe

$$\Delta \tilde{g} = \Delta \tilde{\varepsilon} + \Delta (k.IB) = \Delta \tilde{\varepsilon} + \Delta k.IB + k.\Delta IB$$

The revision of the OFCE forecast by -1.5 points for 2012 that took place between April 2011 and October 2012 breaks down as follows: -1.3 points from the revision of the fiscal impulses, and -0.3 point from the upward revision of the multiplier (table). The sum of the effects of the other sources of revision adds 0.1 percentage point growth in 2012 compared with the forecast made in April 2011. In contrast, the revision for 2013 is due mainly to the increase in the size of the multiplier.

As for the international institutions, these elements (size of the multiplier, spontaneous growth, etc.) are not all known to us, except for the fiscal impulses. There are a number of polar cases that can be used to infer an interval for the multipliers used in the forecasting. In addition, if it is mainly revisions of the fiscal impulse and revisions of the size of the multiplier that are the source of the revision of the growth forecasts, as a first approximation it can be assumed that $\Delta e = 0$. We can then calculate the implied multiplier for the case that the entirety of the revision is attributed to the revision of the fiscal impulses, and for the case that the revision is divided between the revision of the multiplier and the revision of the impulse.

Attributing the entirety of the revisions of the forecasts for 2012 to the revision of the impulses would imply very high initial multipliers, on the order of 2.5 for the IMF to 4.3 for the OECD (Table), which is not consistent with the IMF analysis (which evaluates the current multiplier at between 0.9 and 1.7). On the other hand, the order of magnitude of the inferred multipliers for the IMF (1.4) and the Commission (1.1) for the year 2013 seems closer to the current consensus, if we look at the current literature on the size of the

multipliers.

The hypothesis could also be made that in the recent past the Commission, the OECD and the IMF based themselves on multipliers derived from DSGE models, which are generally low, on the order of 0.5 [1]. Adopting this value for the first forecasting exercise (April 2011 for the year 2012 and April 2012 for 2013), we can calculate an implicit multiplier such that the entirety of the revisions breaks down between the revision of the impulse and the revision of the multiplier. This multiplier would then be between 2.8 (OECD) and 3.6 (EC) for the year 2012, and between 1.3 (OECD and IMF) and 2.8 (EC) for 2013.

Table. Breakdown of the revisions in the growth forecasts for the euro zone

	Re	evision of t	he OFCE fo	recasts			
		$\Delta \widetilde{g}$	$\Delta k.IB$	$k.\Delta IB$	$\Delta \tilde{\epsilon}$	k_0	k_1
2012		-1.5	-0.3	-1.3	0.1	1.1	1.6
2013		-0.8	-0.7	-0.1	0.0	1.1	1.6
The entire revision is at	tributed to th	e revision	of the impu	ılse			
		$\Delta \tilde{g}$	$\Delta k.IB$	$k. \Delta IB$	Δε	k_0	k_1
IMF	2012	-2.2	0.0	-2.2	0.0	2.5	2.5
	2013	-0.7	0.0	-0.8	0.0	1.4	1.4
Commission	2012	-2.2	0.0	-2.2	0.0	3.1	3.1
	2013	-0.9	0.0	-0.9	0.0	1.1	1.1
OECD	2012	-2.4	0.0	-2.4	0.0	4.3	4.3
	2013	-1.0	0.0	-1.0	0.0	-4	-4
The entire revision is at	tributed to th	e revision	of the mult	iplier			
		$\Delta \widetilde{g}$	$\Delta k.IB$	$k. \Delta IB$	Δε	k_0	k_z
IMF	2012	-2.2	-1.7	-0.4	0.0	0.5	3.1
	2013	-0.7	-0.4	-0.3	0.0	0.5	1.3
Commission	2012	-2.2	-1.9	-0.4	0.0	0.5	3.6
	2013	-0.9	-0.5	-0.4	0.0	0.5	2.8
OECD	2012	-2.4	-2.2	-0.3	0.0	0.5	2.8
	2013	-1.0	-1.1	0.1	0.0	0.5	1.3
The final multiplier is va	alued at 1.3						
		$\Delta \widetilde{g}$	$\Delta k.IB$	$k. \Delta IB$	Δε	k_0	k_1
IMF	2012	-2.2	-0.5	-0.4	-1.2	0.5	1.3
	2013	-0.7	-0.4	-0.3	0.0	0.5	1.3
Commission	2012	-2.2	-0.5	-0.4	-1.4	0.5	1.3
	2013	-0.9	-0.2	-0.4	-0.3	0.5	1.3
OECD	2012	-2.4	-0.8	-0.3	-1.4	0.5	1.3
	2013	-1.0	-1.1	0.1	0.0	0.5	1.3

Sources: IMF, European Commission, OECD, OFCE 2012 calculations and forecasts.

The revisions of the forecast for 2012 are not primarily drawn from a joint revision of the fiscal impulses and the size of the multipliers. A significant proportion of the revisions for

growth also comes from a downward revision for spontaneous growth. Suppose now that the final multiplier is worth 1.3 (the average across the range estimated by the IMF); the revision of the spontaneous growth in the euro zone then accounts for more than 50% of the revision in the forecast for the euro zone in 2012, which reflects the optimistic bias common to the Commission, the OECD and the IMF. In comparison, the revision of spontaneous growth accounts for less than 10% of the revision in the OFCE forecast for 2012.

On the other hand, the size of the multipliers inferred from the revisions of the forecasts for 2013 appears to accord with the range calculated by the IMF — on the order of 1.1 for the Commission, 1.3 for the OECD and 1.3 to 1.4 for the IMF. The revisions of the growth forecasts for 2013 can therefore be explained mainly by the revision of the fiscal impulses planned and the increase in the multipliers used. In this sense, the controversy over the size of the multipliers is indeed reflected in an increase in the size of the multipliers used in the forecasting of the major international institutions.

[1] See, for example, European Commission (2012): "Report on public finances in EMU", European Economy no. 2012/4. More precisely, the multiplier from the QUEST model of the European Commission is equivalent to 1 the first year for a permanent shock to public investment or civil servant pay, 0.5 for other public expenditure, and less than 0.4 for taxes and transfers.

[i] See, for example, page 41 of the <u>World Economic Outlook of</u> the <u>IMF</u> from October 2012: "The main finding ... is that the multipliers used in generating growth forecasts have been systematically too low since the start of the Great Recession, by 0.4 to 1.2, depending on the forecast source and the

specifics of the estimation approach. Informal evidence suggests that the multipliers implicitly used to generate these forecasts are about 0.5. So actual multipliers may be higher, in the range of 0.9 to 1.7."

[ii] See, for example, page 115 of the European Commission's Report on Public finances in EMU: "In addition, there is a growing understanding that fiscal multipliers are non-linear and become larger in crisis periods because of the increase in aggregate uncertainty about aggregate demand and credit conditions, which therefore cannot be insured by any economic agent, of the presence of slack in the economy, of the larger share of consumers that are liquidity constrained, and of the more accommodative stance of monetary policy. Recent empirical works on US, Italy, Germany and France confirm this finding. It is thus reasonable to assume that in the present juncture, o f the developed economies undergoing consolidations, and in the presence of tensions in the financial markets and high uncertainty, the multipliers for composition-balanced permanent consolidations are higher than normal."

[iii] See, for example, page 20 of the <u>OECD Economic Outlook</u> from November 2012: "The size of the drag reflects the spillovers that arise from simultaneous consolidation in many countries, especially in the euro area, increasing standard fiscal multipliers by around a third according to model simulations, and the limited scope for monetary policy to react, possibly increasing the multipliers by an additional one-third."

Friends of acronyms, here comes the OMT

By <u>Jérôme Creel</u> and <u>Xavier Timbeau</u>

We had the OMD with its Orchestral Manœuvres in the Dark, and now the OMT with its Orchestral Manœuvres in the [liquidity] Trap, or more precisely, "Outright Monetary Transactions", which is undoubtedly clearer. The OMT is a potentially effective mechanism that gives the European Central Bank (ECB) the means to intervene massively in the euro zone debt crisis so as to limit the differences between interest rates on euro zone government bonds. The possibility that a country that comes into conflict with its peers might leave the euro zone still exists, but if there is a common desire to preserve the euro then the ECB can intervene and play a role comparable to that of the central banks of other major states. Opening this door towards an escape route from the euro zone's sovereign debt crisis has given rise to great hope. Nevertheless, certain elements, such as conditionality, could quickly pose problems.

The OMT is simply a programme for the buyback of government bonds by the European Central Bank, like SMP 1.0 (the Securities Markets Programme) which it replaces but limited to States that are subject to a European Financial Stability Fund / European Stability Mechanism (EFSF / ESM) programme and thus benefiting from European conditional aid. For the ECB to intervene, the country concerned must first negotiate a macroeconomic adjustment plan with the European Commission and the European Council, and apply it. The ECB, potentially members of the European Parliament or the IMF can be a party to this (these institutions — the Commission, the ECB and the IMF — form the Troika of men in black, so famous and feared in Greece). Secondly, and more importantly, the country will be under the supervision of the Troika thereafter.

So if Italy and Spain want to benefit from the purchase of their bonds by the ECB, then their governments will have to submit to an EFSF or ESM adjustment programme. This does not necessarily imply that the plan imposed will be more drastic in terms of austerity than what these governments might have already devised or implemented (the doctrinaire approach in the management of public finances is highly contagious Europe), but it will require the two countries to submit ex ante to outside scrutiny of any adjustment plan they develop and ex post to control by the Commission and the Council. If the country under surveillance starts ex post to veer away from implementing the adjustment plan, then it could, of course, withdraw from the programme, but its sovereign bonds would no longer be covered by OMTs. They would lose the support of their peers and would thus sail into the financial markets in uncharted waters. That would probably be the first step towards a default or an exit from the euro.

Furthermore, the ECB has not committed itself to absorbing all the bonds issued and thus maintains a real threat capacity: if the country were to rebel, it could be obliged to face higher rates. The OMT thus introduces both a carrot (lower rates) and a stick (to let the rates rise, sell the bonds the ECB holds in its portfolio and thereby push rates upward), upon each new issue. The OMT is therefore akin to being put under direct control (conditionality) with progressive sanctions and an ultimate threat (exiting the programme).

The ECB says that its interventions will mainly cover medium-term securities (maturity between 1 and 3 years), without excluding longer-term maturities, and with no quantitative limits. Note that short / medium-term emissions usually represent a small proportion of total emissions, which tend to be for 10 years. However, in case of a crisis, intervention on short-term maturities provides a breath of fresh air, especially as maturing 10-year securities can be refinanced by 3-year ones. This gives the Troika additional leverage in

terms of conditionality: the OMT commitment on securities is only for three years and must be renewed after three years. The financial relief for countries subject to the programme may be significant in the short term. For example, in 2012 Spain, which has not yet taken this step, will have issued around 180 billion euros of debt. If the OMT had reduced Spain's sovereign borrowing rates throughout 2012, the gain would have amounted to between 7 and 9 billion for the year (and this could be repeated in 2013 and 2014, at least). This is because, instead of a 10-year rate of 7%, Spain could be benefitting from the 2% rate at which France borrows for 10 years, or instead of its 4.3% rate at 3 years, Spain could have borrowed at 0.3% (France's 3-year sovereign rate). This is the maximum gain that can be expected from this programme, but it is significant: this roughly represents the equivalent of the budgetary impact of the recent VAT hike in Spain (or a little less than one Spanish GDP point). This would not alter Spain's fiscal situation definitively, but it would end the complete nonsense that saw Spaniards paying much more for their debt to compensate their creditors for a default that they have been striving arduously not to trigger.

It can even be hoped (as can be seen in the easing of Spanish sovereign rates by almost one point following the ECB announcement on Thursday, 6 September 2012, or the almost half a point reduction in Italian rates) that the mere existence of this mechanism, even if Spain or Italy do not use it (and thus do not submit to control), will be enough to reassure the markets, to convince them that there will be no default or exit from the euro and therefore no justification for a risk premium.

The ECB announced that it would terminate its preferred creditor status for the securities. This provision, which had been intended to reduce the risk to the ECB, led to downgrading the quality of securities held outside the ECB and thus reducing the impact of ECB interventions on rates. By

acquiring a government bond, the ECB shifted the risk onto the bonds held by the private sector, since in case of a default the Bank was a preferred creditor that took priority over private holders of bonds of the same type.

The ECB explained that its OMT operations will be fully sterilized (the impact on the liquidity in circulation will be neutral), which, if it is taken at its word, implies that other types of operations (purchases of private securities, lending to banks) will be reduced correspondingly. What do we make of this? The example of the SMP 1.0 can be drawn on in this regard. SMP 1.0 was indeed also accompanied by sterilization. This sterilization involved short-term deposits (1 week, on the ECB's liabilities side), allocated in an amount equal to the sums involved in the SMP (209 billion euros to date, on the ECB's assets side). Each week, the ECB therefore collects 209 billion euros in short-term fixed-term deposits. This is therefore a portion of bank deposits that the ECB assigns to the sterilization instrument, without there being sterilization in the strict sense (because this does not prevent an increase in the size of the ECB's balance sheet nor does it reduce the potential liquidity in circulation). The mention of sterilization in the OMT appears to be an effort at presenting this in a way that can convince certain states, such as Germany, that this monetary policy will not be inflationary and therefore not contrary to the mandate imposed on the Bank by the Treaty on the European Union. Currently, and because the crisis remains unresolved, private banks have substantial deposits with the ECB (out of fear of entrusting these deposits to other financial institutions), which gives considerable flexibility to prevent the announced sterilization from affecting the liquidity in circulation (the ECB has a little more than 300 billion euros in deposits that are not mobilized for sterilization). The ECB can then probably use the current accounts (by blocking them for a week), which poses no difficulty since the ECB lends to the banks on tap through long-term refinancing operations (LTROs).

At worst, the ECB would lose money in the sterilization operation in case of a gap in compensation between the fixed-term deposits and the loans granted to banks. Sterilization could therefore lead to this kind of absurd accounting, but wind up, in a situation of monetary and financial crisis, having no impact on liquidity. On the other hand, if the situation normalizes, the constraint of sterilization would weigh more heavily. We're not there yet, but when we do get there, the ECB needs to limit lending to the economy or to accept an increase in liquidity if the OMT continues to be implemented for some euro zone members.

The deal that is now on the table places the euro zone countries in a formidable dilemma. On the one hand, acceptance of the Treaty on Stability, Coordination and Governance of the euro zone (TSCG) determines eligibility for the EFSF and the ESM [1], and therefore now determines eligibility for the OMT programme. Refusing to sign the fiscal treaty means rejecting in advance the potential intervention of the ECB, and thus accepting that the crisis continues until the breakup of the euro zone or until a catastrophic default on a sovereign debt. On the other hand, signing the treaty means accepting the principle of an indiscriminately restrictive fiscal strategy (the rule on public debt reduction included in the TSCG will be devastating) that will trigger a recession in the euro zone in 2012 and perhaps in 2013.

Signing the treaty also means relieving the pressure of the markets, but only to wind up submitting solely to the Troika and to the baseless belief that the fiscal multipliers are low, that European households are Ricardian and that the sovereign debt is still holding back growth. It is true that lowering sovereign interest rates, particularly those of Italy and Spain, will create some breathing room. But the main gain from lower rates would be to spread the fiscal consolidation over a longer period of time. Interest rates place a value on time, and reducing them means granting more time. The debts

contracted at negative real interest rates are not ordinary debts, and do not represent the same kind of burden as debts issued at prohibitively high rates.

It would be a terrible waste to gain new maneuvering room (the OMT) only to bind one's hands immediately (the TSCG and the Troika's blind fiscal strategy). Only a change in fiscal strategy would make it possible to take advantage of the door opened by the ECB. In short, saving the euro will not help if we do not first save the EU from the disastrous social consequences of fiscal blindness.

[1] Paragraph 5 of the preamble to the Treaty establishing the European Stability Mechanism states: "This Treaty and the TSCG are complementary in fostering fiscal responsibility and solidarity within the economic and monetary union. It is acknowledged and agreed that the granting of financial assistance in the framework of new programmes under the ESM will be conditional, as of 1 March 2013, on the ratification of the TSCG by the ESM Member concerned and, upon expiration of the transposition period referred to in Article 3(2) TSCG on compliance with the requirements of that article."