

European Month-end Index Projections

Projected changes supportive for France, Italy and Germany

- **European Government Bond Index (EGBI):** The EGBI is projected to extend by 0.05 at the end of November. Among country indices, France is likely to benefit the most, followed by Italy and Germany.
- **Changes on domestic curve:** We expect the Spanish index to extend by its largest amount in a year on an unweighted basis. However the impact is relatively muted in weighted terms because of the fall in its weight in the index.
- **Curve split:** We expect index changes to be supportive for the long end of Finland and the belly of the Spanish curve.
- **EGBI extension in the context of the US and UK:** Among the three indices, the US index is expected to extend the most at the end of November. This extension is also large relative to its 12-month range (see [Citi Treasury Index December Compositional Adjustment](#) for details of Treasury index projections). On the other hand, the gilt index is projected to contract slightly.

Aman Bansal, CFA
+91-22-4277-5021
aman1.bansal@citi.com

Figure 1. EGBI: Projected month-end duration change

EGBI Effective Duration			Spectrum of duration changes over last year		
Nov Index	Dec Index (e)	Duration Change (e)	Minimum	Maximum	Average Absolute Change
6.43	6.48	0.046	0.01	0.15	0.06

Source: Citi Research

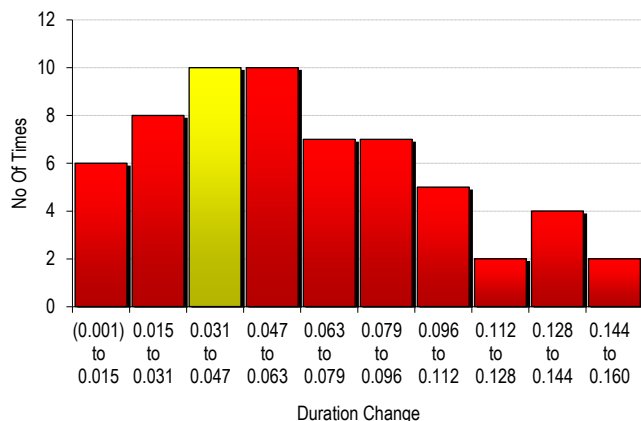
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End-November EGBI changes

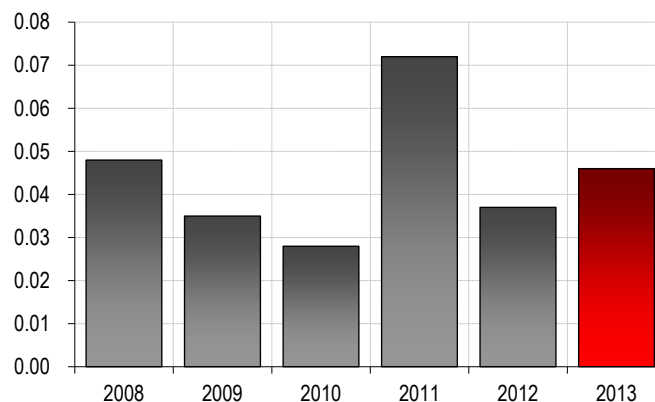
We expect the effective duration of the EGBI to increase by 0.05 at the end of November (Figure 1)¹. This change is around the median for the last 5 years (Figure 2) and in line with the past November changes (Figure 3).

Figure 2. Five-year distribution of month-end EGBI changes



Source: Citi Research

Figure 3. End-November EGBI changes over the last 5 years



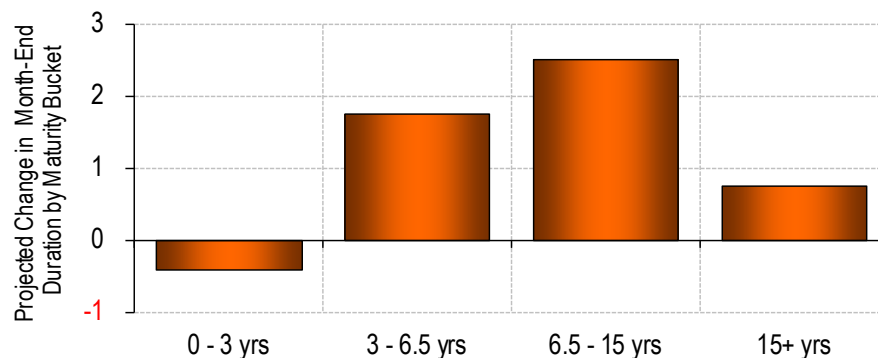
Source: Citi Research

Projected changes on the curve

Support for the 5yr and 10yr sectors

The projected changes should be supportive for the 5yr and 10yr sectors. The changes should also put flattening pressure on 2s10s part of the curve (Figure 4).

Figure 4. End-November projected index changes by curve sector (weighted duration)



Source: Citi Research

€36bn of bonds drop out across Italy and Spain

Issuance over the fixing period – 26 October to 22 November - will be eligible for inclusion in the index at the end of November. On the other hand, bonds that fall below 1 year of residual maturity on the last calendar day of the month are excluded from the index. Based on this criterion, around €36bn of bonds will drop out of the EGBI across Italy (€22bn) and Spain (€14.5bn) at the end of November.

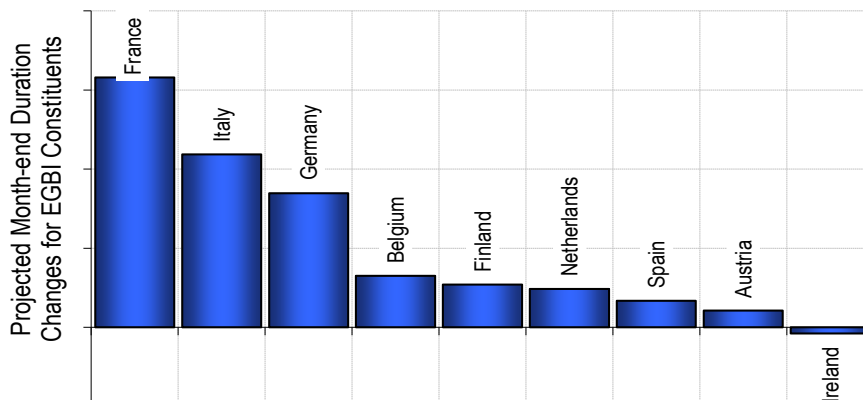
¹ Based on Citi supply estimates. Supply is the main driver of duration projections, but other factors, e.g., yield level and curve shape, also affect the calculations and are subject to change.

Projected changes supportive for France, Italy and Germany

Projected changes supportive for France, Italy & Germany

At a country level, we expect France to extend the most at the end of November, followed by Italy and Germany (Figure 5). No major contraction is expected at the end of November among EGBI country indices.

Figure 5. Weighted duration change at the end of November



Source: Citi Research

Spain to extend by its largest amount in a year (unweighted terms)

Detailed analysis of the changes

Figure 6 shows detailed analysis of end-November EGBI changes. Among the individual country indices that make up the EGBI, we expect the Spanish index to extend by its largest amount in a year. This is largely due to the €22bn of Bono 3.3% Oct14 dropping out of the index. This might result in domestic portfolios being left short duration at the end of the month and prompt curve extension trades. Month-end could, therefore, put flattening pressure on the Spanish curve. However the impact is muted in weighted terms because of the fall in its weight in the index.

For EGBI portfolios, it is the weighted duration change that is most relevant². On this metric, France, Italy and Germany are projected to extend the most within the EGBI. The recent BTP exchange auction has also contributed to the index extension in Italy. However, looking at z-scores, most of the country-level extensions are expected to be below their 5yr average.

Figure 6. Breakdown of end-November EGBI projections

19-Nov-13	Nov Index		Dec Index*		Projected Change			Duration change range over last year (unweighted)				
	% weight in EGBI	Duration	% weight in Index	Duration	Weighted Dur Change X100	Weight Change	Duration Change	Minimum	Maximum	Average Absolute Change	Duration 5yr Z-Score	Weighted Dur 5yr Z-Score
Germany	20.6	6.69	20.8	6.67	0.85	0.19	(0.02)	(0.02)	0.13	0.06	(1.38)	(0.05)
Italy	23.3	6.10	23.2	6.18	1.09	(0.13)	0.08	0.01	0.18	0.08	0.07	(0.30)
France	23.4	6.86	23.5	6.87	1.58	0.17	0.02	(0.04)	0.17	0.07	(0.55)	0.01
Spain	12.5	5.42	12.2	5.59	0.17	(0.35)	0.17	(0.03)	0.17	0.07	1.14	(1.05)
Belgium	6.3	7.06	6.4	7.06	0.32	0.05	(0.01)	(0.04)	0.44	0.08	(0.66)	(0.17)
Netherlands	6.5	6.58	6.5	6.59	0.24	0.02	0.02	(0.10)	0.36	0.08	(0.31)	(0.35)
Ireland	1.9	5.18	1.9	5.18	(0.04)	(0.01)	0.00	(0.03)	0.35	0.05	(0.18)	(0.48)
Austria	3.9	7.19	3.9	7.18	0.11	0.02	(0.01)	(0.04)	0.39	0.10	(0.56)	(0.27)
Finland	1.5	6.36	1.5	6.44	0.27	0.03	0.07	(0.03)	0.55	0.11	(0.11)	0.39

Source: Citi Research

*Projected

² Weighted duration of a country is calculated as (market value of that country) * (effective duration) / (total market value of the EGBI). This is very significant for an EGBI portfolio manager as he tries to keep it unchanged through rebalancing at the month-end (within the bounds of his mandate).

Summary of pressures on individual country curves from the projected index changes

- Support for long-end of Finland

- Support for the belly of the Spanish curve

Summary of pressures on individual country curves³

Figure 7 summarises the pressures on individual country curves from the projected index changes. Green arrows indicate support for prices relative to other points on the respective domestic curves (and red arrows point to downward price pressure). Double arrows indicate particularly strong pressure on that part of the domestic curve. White/transparent arrows indicate weaker price pressures. The underlying detail is shown below in Figure 8 to Figure 23.

Figure 7. Summary of price pressures on individual domestic curves

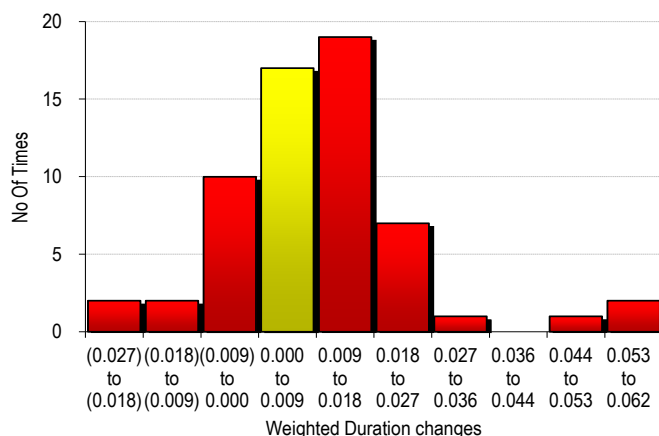
	2yr	5yr	10yr	30yr
Germany				↓
Finland			↓	↑ ↑
Austria				↓
Belgium				↓
Spain		↑	↑	↓
Italy		↑	↑	↓
Netherlands			↑	
	2yr	5yr	10yr	30yr

Source: Citi Research

Putting projected country changes in perspective

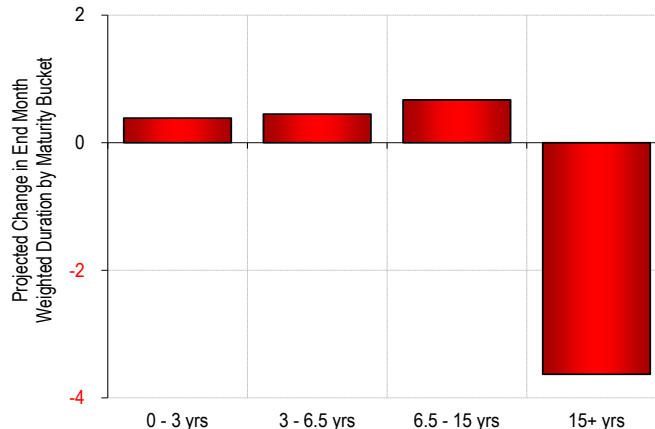
Below we show the distributions of weighted duration changes (charts on the left) and the curve splits (charts on the right) of the projected changes. Based on this, we expect index changes to be supportive for the long end of Finland (Figure 11) and belly of the Spanish curve (Figure 21).

Figure 8. Germany: Distribution of month-end duration changes over the last five years (weighted duration)



Source: Citi Research

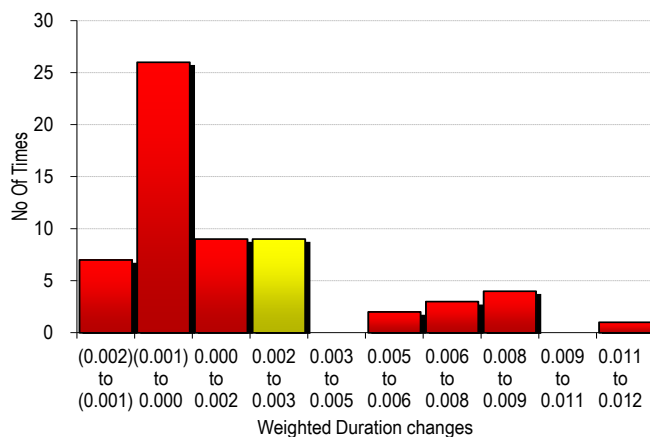
Figure 9. Germany: Maturity split of projected index changes (weighted duration)



Source: Citi Research

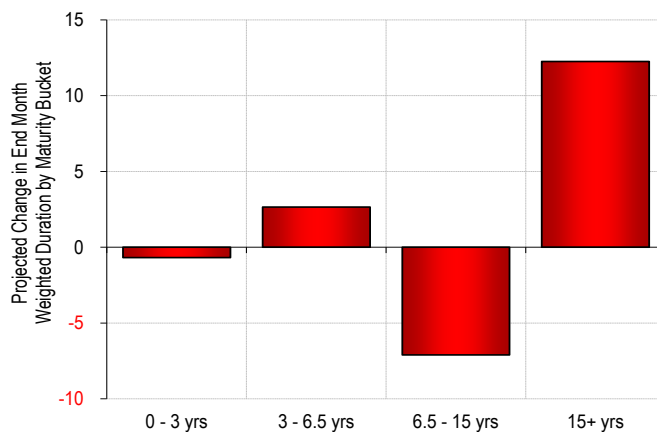
³ Note that all these changes are on the domestic curve only, and should not be viewed as necessarily indicating cross-market opportunities.

Figure 10. Finland: Distribution of month-end duration changes over the last five years (weighted duration)



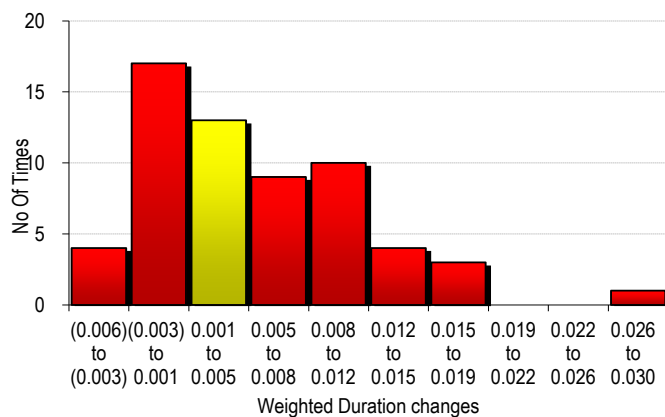
Source: Citi Research

Figure 11. Finland: Maturity split of projected index changes (weighted duration)



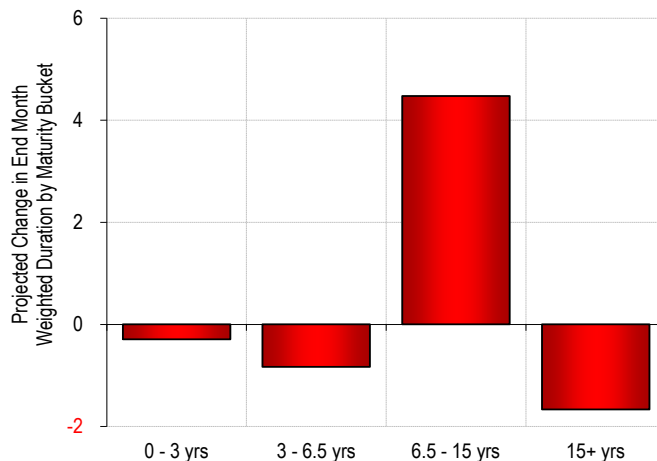
Source: Citi Research

Figure 12. Netherlands: Distribution of month-end duration changes over the last five years (weighted duration)



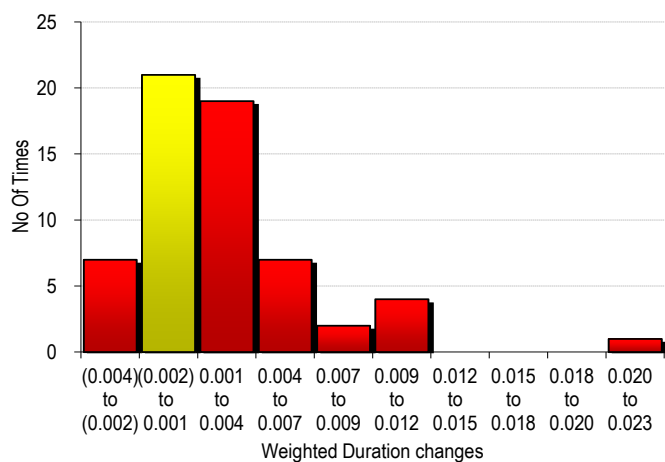
Source: Citi Research

Figure 13. Netherlands: Maturity split of projected index changes (weighted duration)



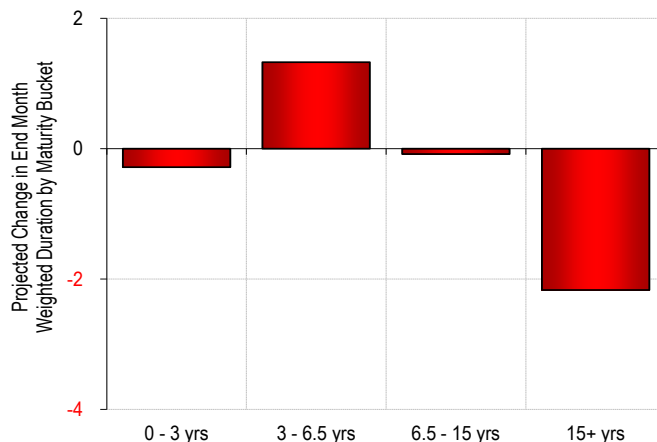
Source: Citi Research

Figure 14. Austria: Distribution of month-end duration changes over the last five years (weighted duration)



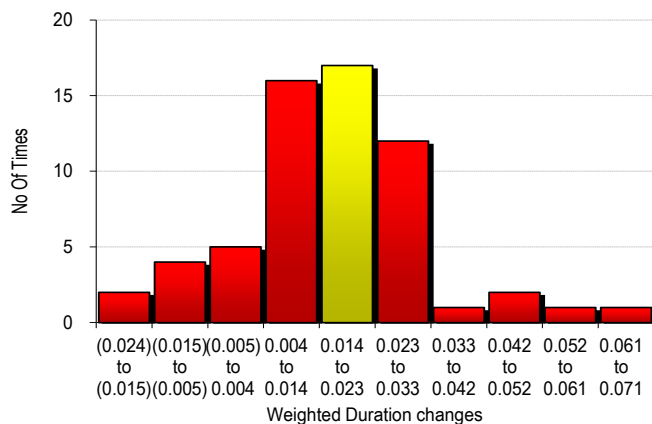
Source: Citi Research

Figure 15. Austria: Maturity split of projected index changes (weighted duration)



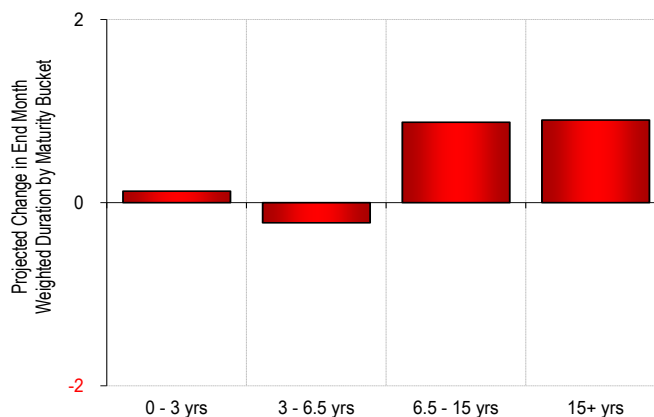
Source: Citi Research

Figure 16. France: Distribution of month-end duration changes over the last five years (weighted duration)



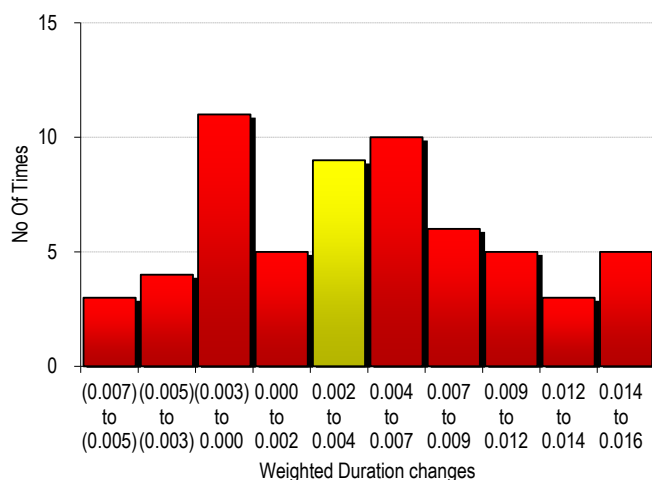
Source: Citi Research

Figure 17. France: Maturity split of projected index changes (weighted duration)



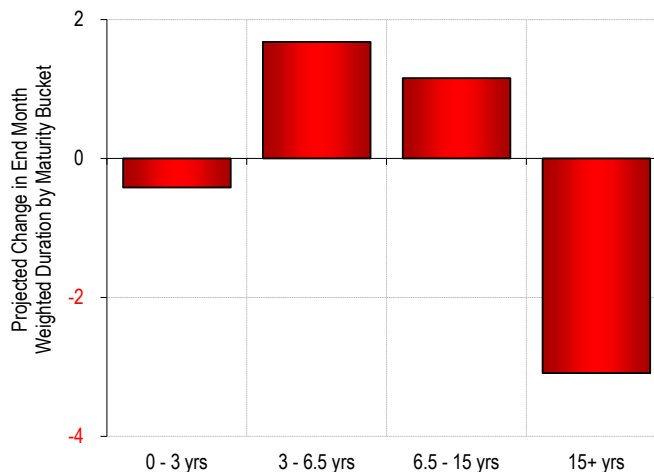
Source: Citi Research

Figure 18. Belgium: Distribution of month-end duration changes over the last five years (weighted duration)



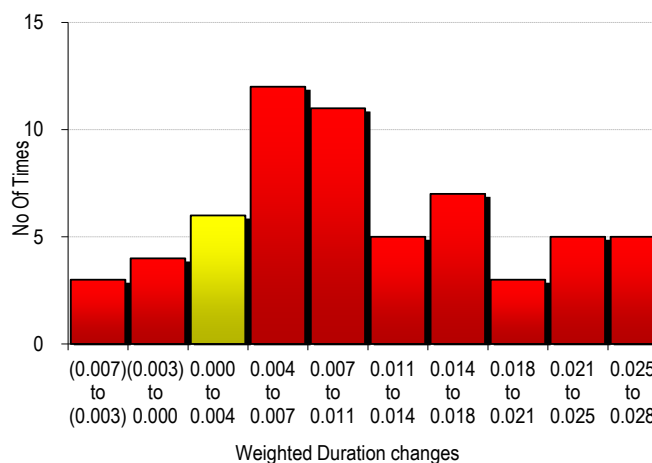
Source: Citi Research

Figure 19. Belgium: Maturity split of projected index changes (weighted duration)



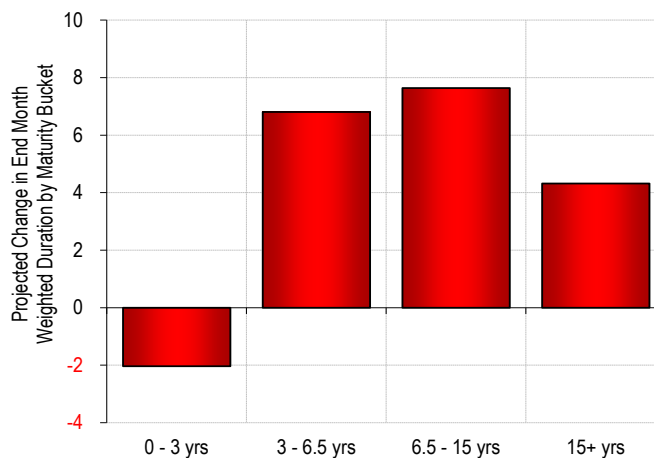
Source: Citi Research

Figure 20. Spain: Distribution of month-end duration changes over the last five years (weighted duration)



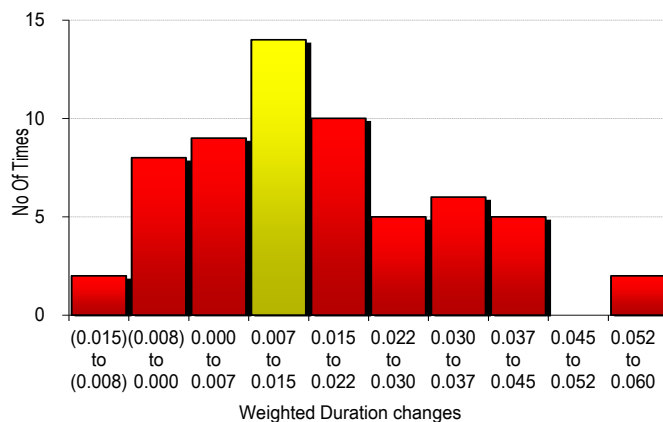
Source: Citi Research

Figure 21. Spain: Maturity split of projected index changes (weighted duration)



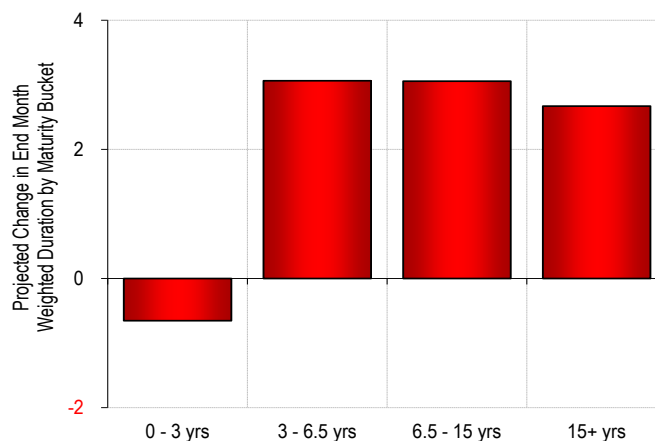
Source: Citi Research

Figure 22. Italy: Distribution of month-end duration changes over the last five years (weighted duration)



Source: Citi Research

Figure 23. Italy: Maturity split of projected index changes (weighted duration)



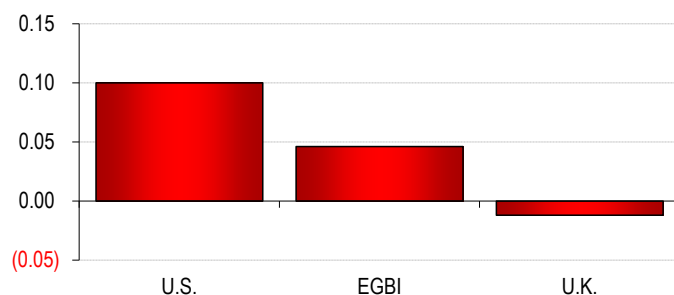
Source: Citi Research

EGBI extension in context of US and UK

Here we look at the relative extensions in EMU, US and UK (Figure 24) and place them in the context of their respective 12-month ranges (Figure 25).

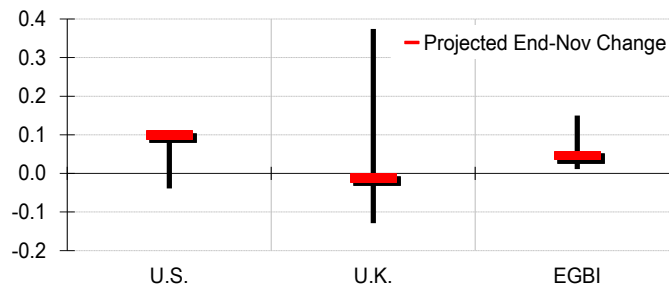
Among the three indices, the US index is expected to extend the most at the end of November. This extension is also large relative to its 12-month range (see [Citi Treasury Index December Compositional Adjustment](#) for details of Treasury index projections). On the other hand, the gilt index is projected to contract slightly.

Figure 24. Relative extensions in EMU, US and UK



Source: Citi Research

Figure 25. Projected duration changes vs 12-month range



Source: Citi Research

Figure 26 shows the detailed breakdown of the projected changes.

Figure 26. Details of month-end changes in EMU, US and UK

19-Nov-13	Nov Index	Dec Index*	Projected Change	5yr Z-Score	Duration change range over last year		
					Minimum	Maximum	Average Absolute Change
EGBI	6.43	6.48	0.05	(0.45)	0.01	0.15	0.06
U.S.	4.88	4.98	0.10	1.05	(0.04)	0.10	0.06
U.K.	9.69	9.68	(0.01)	(0.32)	(0.13)	0.37	0.10

Source: Citi Research

*Projected

Appendix A-1

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