

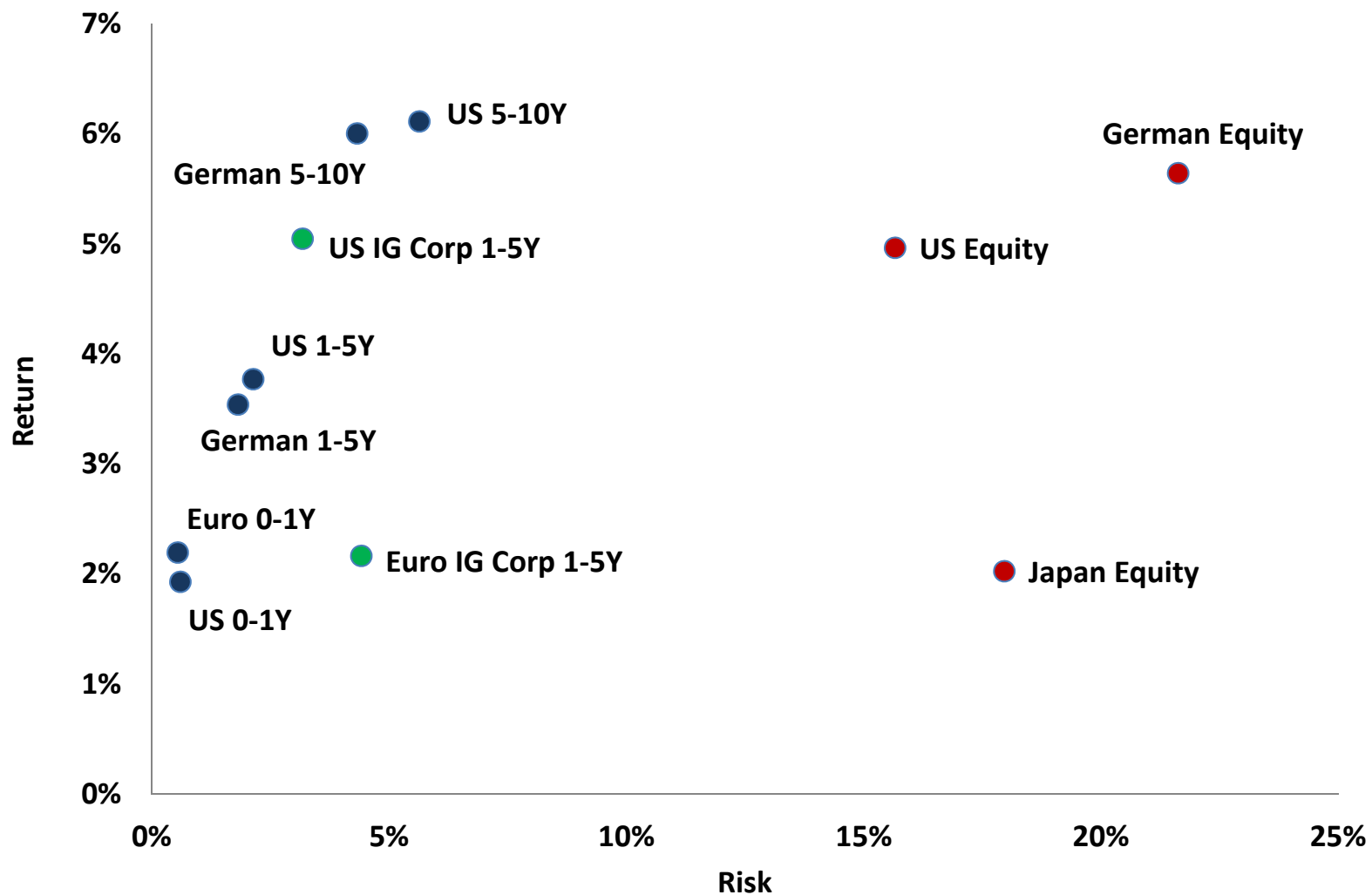


Impact of the current interest rate environment and increased uncertainty on the management of foreign exchange reserves

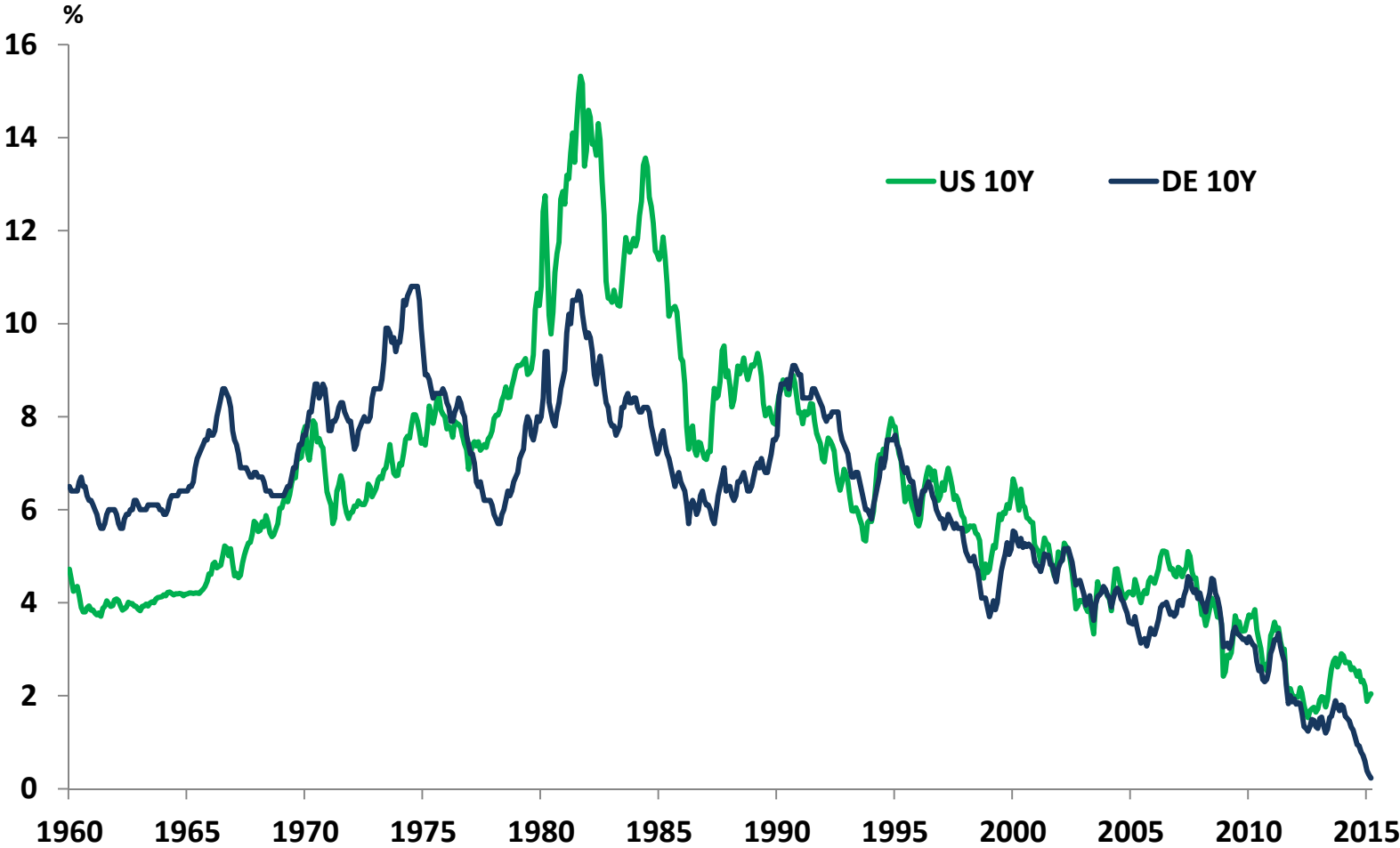
BIS Mexico Meeting on Reserve management
Andrew Abir
Bank of Israel

Risk-return 2000-2015

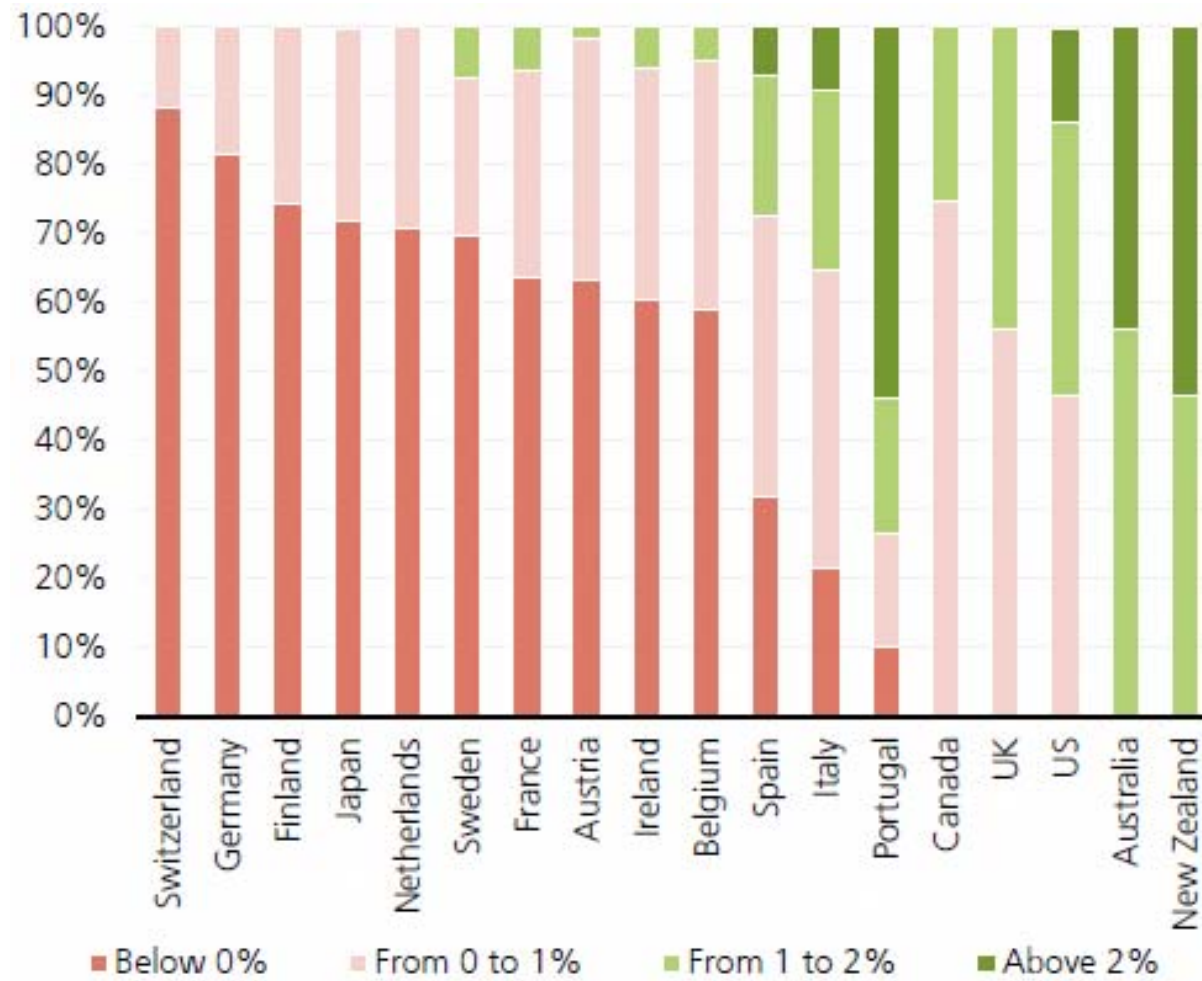
“Fixed income paradise”



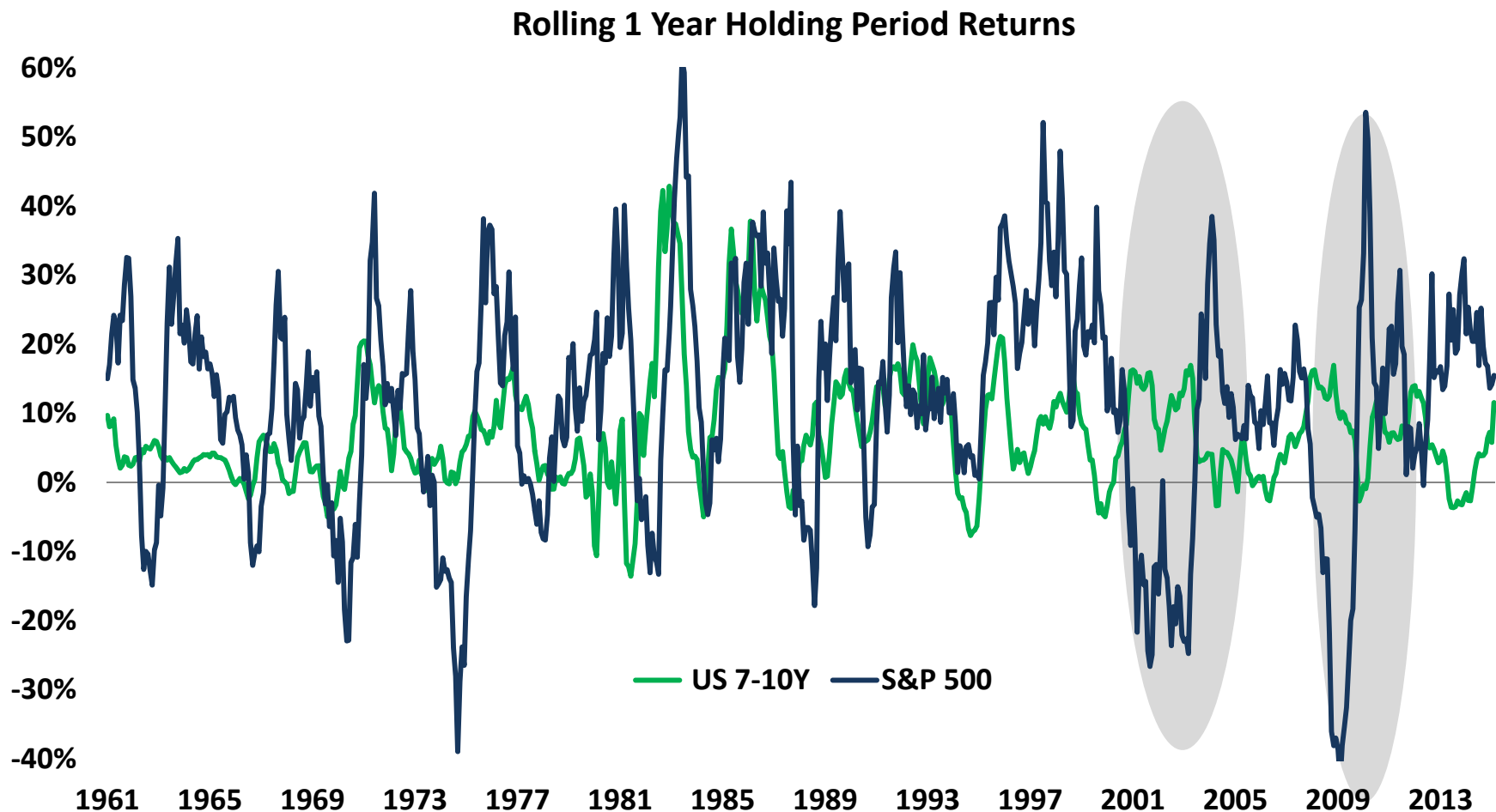
Long yields at their lowest



High percentage of government debt has negative yields

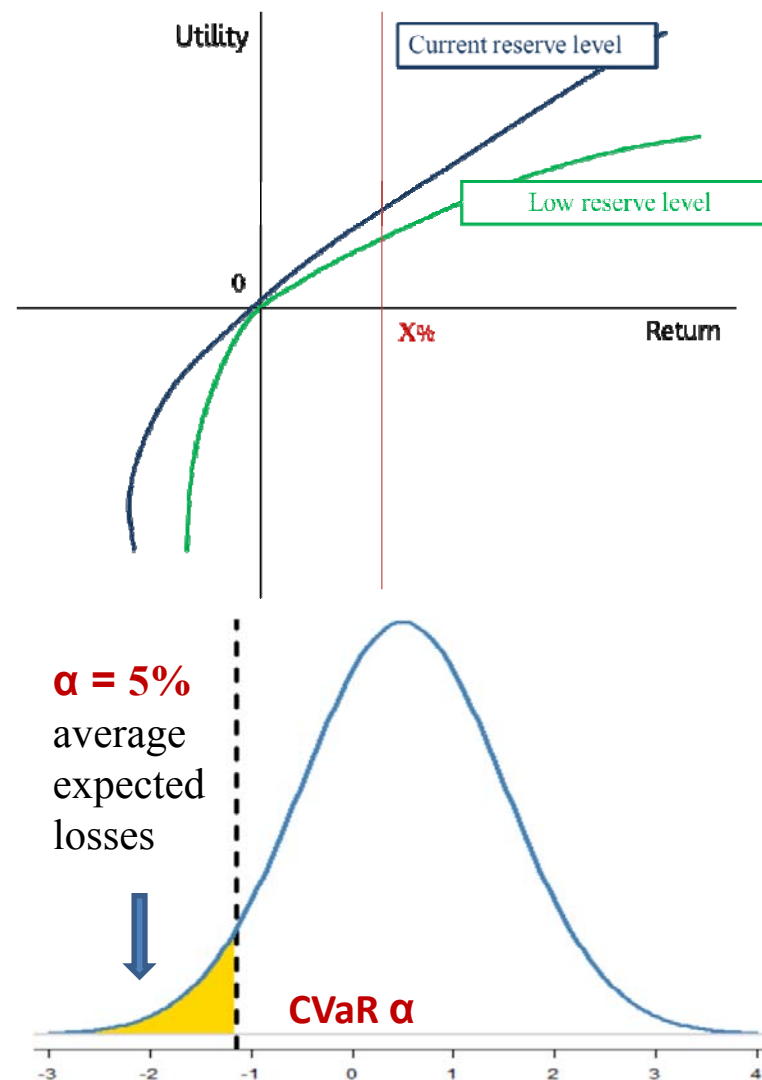


Tail risk of absence of negative correlation between equity and bonds in portfolio

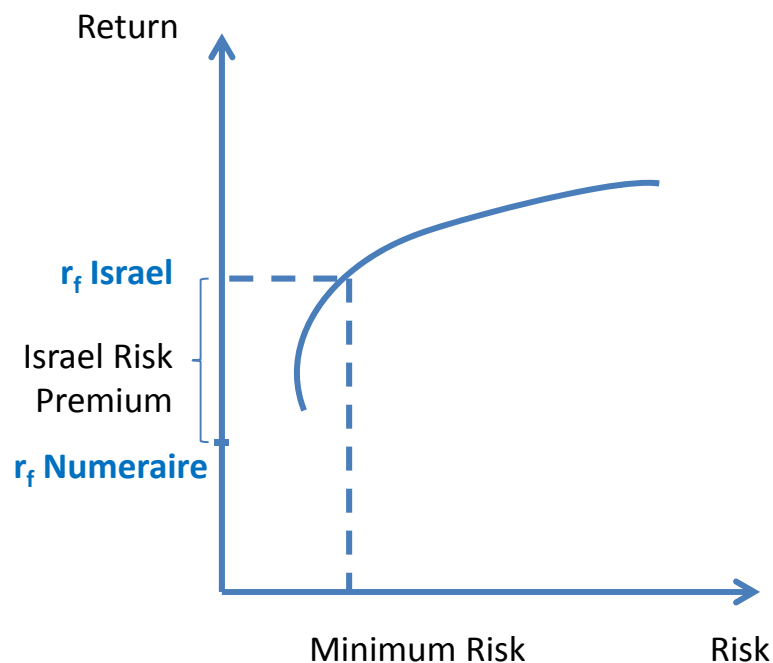


Changes in risk profile

- Changes in in risk profile due to the increase in reserves: the utility from high yield assets is higher
- **From** a shortfall approach, when there were only government bonds in the reserves - no negative return with a 99% probability in a year horizon
- **To** an holistic approach to risk management with higher tolerance to risk **The Monetary Committee set the reserves' risk profile: 400 b.p \geq CVaR_{5%}, one year horizon**
- Introduction of BarraOne as our risk management tool



Israel's risk premium and the minimum risk level



Duration (years)	Weight of equities (%)	CVaR level (bp)	Required average target return* (%)	Israel's risk premium (%)
0.6	3	60	1.9	0.25
1.1	7	170	2.15	0.5
1.7	10	290	2.4	0.75
2.3	13	410	2.65	1

* According to the BR mid-term forecast, the expected return on US, European and UK Treasury bills is 1.65 percent according to numeraire weights.

Sensitivity analysis for the optimal allocation— the curve risk and the business cycle risk



Curve risk	Upward shift in yield curves and under-performance of the equity and corporate sectors in comparison with the forecast 8%	Upward shift in yield curves and out-performance of the equity and corporate sectors in comparison with the forecast 38%
	Downward shift in yield curves and under-performance of the equity and corporate sectors in comparison with the forecast 32%	Downward shift in yield curves and out-performance of the equity and corporate sectors in comparison with the forecast 22%
	Business cycle risk	

Risk-return 2016-2021

BlackRock 5 year projected returns

