

# Discussion of “Portfolio Rebalancing and the Transmission of Large-Scale Asset Programs: Evidence from the Euro Area ”

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## This paper: valuation gains and search for yield

- Testing a particular feature pertaining to the “rebalancing channel”: how fixed income valuation gains made in anticipation of APP affect the “search-for-yield” of institutional investors ?
- Heterogeneity of valuation gains across investors: did the investors that benefited most from valuation gains also bought more riskier assets ?
- Did banks more exposed to valuations gains lend more (or at a cheaper rate) ? Credit channel *à la* Becker Ivashina (JoF, 2015)
- Interesting questions and first paper (to my knowledge) to combine SHS and IBSI-IMIR datasets!

## Framework

Investor  $h$  allocates fractions of its wealth in  $N$  assets,  $\mathbf{w}_{h,t}$ , with  $\sum w_{i,t} = 1$

$$\mathbf{w}_{h,t} = \begin{pmatrix} w_{h,1,t} \\ w_{h,2,t} \\ \vdots \\ w_{h,N,t} \end{pmatrix} ; \mathbf{R}_t = \begin{pmatrix} R_{1,t} \\ R_{2,t} \\ \vdots \\ R_{N,t} \end{pmatrix}$$

The portfolio  $P$  return is:  $R_{h,t}^P = \mathbf{w}_{h,t}^T \mathbf{R}_t$

Shock is on  $\mathbf{R}_t$  NOT on  $\mathbf{w}_{h,t}$

What is the relation between  $w_{h,i,t}$ ,  $R_{h,t-1}^P$  (valuation gain) and the asset  $n$  yield  $r_{i,t}$  ?

## Triple-diff setup

Main specification:

$$\begin{aligned} h_{i,h,t} = & (\beta_0 m_i + \beta_0' r_{i,t} + \beta_0'' m_h r_{i,t}) \\ & + (\beta_1 m_h T_t + \beta_1' T_t r_{i,t} + \beta_1'' m_h T_t r_{i,t}) \\ & + \gamma T_t + a_{i,t} + b_{n,t} + \eta_{i,h,t} \quad (1) \end{aligned}$$

*“A positive estimate for the coefficient  $\beta_1''$  would indicate that between the two periods investors more exposed to the valuation shock rebalanced their portfolio towards higher-yielding securities more intensely than other holding sectors.”*

Alternative to  $r_{i,t}$ : credit spread, maturity, currency risk

## Results

- Valuation gains between 2014Q1 and 2015Q2: up to 4% of gain at the 75% percentile
- No significant relationship between these gains and rebalancing toward riskier assets in EA as a whole
- Only investors from vulnerable countries and exposed to credit and corporate risk seem to have rebalanced toward risky securities
- Banks more exposed to valuation gains lent at cheaper rates to households ; in vulnerable countries they also lent more to NFCs.

## Comments 1 - on assumptions made

- Valuation change btw *“2014Q1 and 2015Q2, the first data point after the decline in yields induced by expectations of the APP”*: Why not taking a narrower window ?
- Focusing on newly-issued securities: alternative methods to take into account the entire portfolios ? ie. looking to nominal values?
- Yield may be not the best proxy for risk-taking + would be interesting to track risk appetite toward more risky asset classes.

## Comments 2 - On results found

Results not supporting a risk-taking channel in anticipation of APP

- Valuation changes also reflect weaker fundamentals
- High yield may reflect in part low demand (neg. sign of  $\beta'_0$ )
- *“incentives for rebalancing are commensurate to the changes in the value of the portfolio”* When yields fall, who are the biggest winners and are they likely to rebalance?

In Koijen et al. (2016): risk-taking channel not the main channel of EA APP also for the implementation period 2015q2-2015q4:

- Eurosystem absorbed duration, credit and corporate risk in the financial system
- This led almost all investors sectors to reduce their risk exposures
- With the exception of insurances, pension funds and other financial institutions: a bit more of duration and sovereign risk

Table 1: The reallocation of risk in the Euro area

G	Sector	Duration risk				Sov risk			
		< 15	15Q2	15Q3	15Q4	< 15	15Q2	15Q3	15Q4
NV	MFI	12.7	11.3	11.2	10.8	7	7.4	7.6	6.8
NV	OFI	11.5	11.7	11.8	11.7	7.2	8.3	8.5	8.3
NV	ICPF	20.8	20.9	20.9	20.4	6	6.9	7.2	7
NV	Household	1.2	.9	.9	.8	.2	.2	.2	.2
NV	Other	2	2	2	1.9	.7	1	.9	.9
V	MFI	7.3	7.3	7	6.5	23.2	20.4	20	19.2
V	OFI	2.2	2.5	2.3	2.3	6	6	5.7	5.5
V	ICPF	5	5.4	5.3	6.3	9.3	10.1	9.9	10.9
V	Household	3.5	2.8	2.7	2.6	4.8	3.9	3.8	3.7
V	Other	1.5	1.4	1.4	1.3	4.1	3.8	3.7	3.5
	Foreign	31.4	30.3	29.3	28.6	28.1	26.9	26	26.6
	ECB	1	3.5	5.2	6.8	3.3	5.1	6.3	7.4

Note: NV “non-vulnerable” countries. Source: Koijen et al. “Euro-Area Quantitative Easing and Portfolio Rebalancing” (AER P&P 2017)



## Conclusion

- A risk-taking channel paper with a great work on data: first paper to merge SHS and IBSI-IMIR datasets, thus able to link financial assets holdings and bank lending
- What's the source of search-for-yield ?
- Results strongly suggest that risk-taking is not the main channel of APP in EA, consistent with other findings
- Suggest other channels are at play: eg. duration risk channel ?