RTS 28 Quality of Execution Annual Report

Firm: PGGM Vermogensbeheer BV

Calendar Year Disclosure Period: 1 January 2020 to 31 December 2020

Date: 30 April 2021

Summary of classes of instruments included in this report, and class of instruments not included in this report (because PGGM has not executed client orders in that class of instruments)¹:

Classes of instruments included in this report

- Debt Instruments
- Interest rates derivatives
- Equities
- Credit derivatives
- Currency derivatives
- Futures

RTS 28 reporting requires firms to classify executed orders as "passive", "aggressive" or "directed", where these are defined as the following:

- "passive" order means an order entered into the order book that provided liquidity;
- "aggressive" order means an order entered into the order book that took liquidity;
- "directed" order means an order where a specific execution venue was specified by the client prior to the execution of the order.

Only orders executed directly on exchange would be eligible for this "passive" or "aggressive" classification. This not the case with PGGM. Trading volume identified as "passive" or "aggressive" in the following reporting is therefore not applicable.

PGGM does not have any client relationships where the client directs PGGM to use a specific venue. There are therefore no directed orders.

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¹ As defined in Annex 1 of RTS 28.

Class of instrument	Debt Instruments
General observations	Debt instruments include both bonds and money market instruments.
	Summary of analysis
Execution factors	PGGM defines the best possible result as a proper balance between cost, service and client added value within the existing risk and regulatory frameworks. PGGM takes into account the following factors:
	 Sustainability factors Relationship factors Service consistency Footprint Price Cost of execution Nature and size of the order Speed and likelihood of execution Settlement factors All other relevant factors Cost is determined as total cost. This includes price, and all other costs of execution, such as venue rebates, clearing cost, settlement cost and/or third party execution cost.
	Best Execution is a process that cannot always be drilled down to a single execution. Elements such as sustainability factors, relationship factors and service consistency need to be monitored and valued over a longer period of time.
Close links, conflicts of interest and	Close links PGGM has no close links with execution venues/brokers that were used to execute orders
common ownership with respect	Conflicts of interest PGGM has no conflicts of interest to report.
to execution venues	Common ownerships PGGM has no common ownership to report.
Specific arrangements with execution venues regarding payments made or received,	PGGM has no specific arrangements to report.

discounts, rebates or non-monetary benefits received	
Factors leading to a change in the list of execution venues listed in the order execution policy Differentiation across client	There were no changes to the list of execution venues/brokers in PGGM's Order Execution Policy. N/A - all of PGGM's clients are classified as professional clients
categories Use of data / tools relating to quality of execution	PGGM has used the data and/or tools relating to quality of execution coming from: Order management System Trading venues In house TCA report In house Broker review
Use of consolidated tape provider output	PGGM has not used output from consolidated tape providers, as no useful consolidated tape data was available in 2020 for this instrument type.
Use of DEA	No direct electronic access to execution venues we used. The list of the top 5 venues:

	Class of Instrument	Debt Instruments						
	Notification if <1 average trade per business day		N					
	in the prvious year	N						
	Top 5 Venues in terms of volume (descending	Proportion of volume	Proportion of orders executed	Percentage of	Percentage of	Percentage of		
	order)	traded as a percentage of	traded as a percentage of total	passive orders	agressive	directed		
		total in that class	in that class		orders	orders		
	XFRA							
	Deutsche Boerse AG	31,28%	8,25%	na	na	na		
	XPAR							
	Euronext Paris S.A.	21,40%	5,35%	na	na	na		
	XAMS							
	Euronext Amsterdam	13,22%	2,29%	na	na	na		
	XBRU							
	Euronext Brussels	7,60%	1,51%	na	na	na		
	XWBO							
	Wiener Boerse	5,01%	1,45%	na	na	na		
Conclusion	PGGM evaluates both the execution as well as its counter	rparties along the benchmark of	its best execution definition.					
	To evaluate brokers and counterparties a broker review is	s used. The 2020 broker review	ndicates that counterparties used acted	d in line with PGG	M's best execution	n policy.		
	Evaluation of transactions is done via a Transaction Cost Analysis (TCA) report. This report evaluates the cost and footprint on a transaction basis as well as over all transactions. The 2020 TCA report indicates that PGGM acted in line with its best execution policy.							
	An exemption report is set up and is monitored by Compliance. In 2020 no incidents were reported.							
		Electronic trading platforms are selected on basis of functionality, counterparties connected, liquidity offered and user-friendliness. Periodically PGGM evaluates the offerings available in the market to see if the proper platforms are installed and used. The 2020 evaluation indicates that platforms used meet the requirements in line with PGGM's best execution policy.						
	The system of the speed to de indicates that DCCM acted in	The output of the used tools indicates that PGGM acted in line with its best execution policy during 2020.						

Class of instrument	Interest rate derivatives
General observations	Interest rate derivatives include interest rate swaps only. In 2020 Tradeweb has been the dominant venue for Interest rate derivatives trading. This venue is one of the leading venues that supports the electronic order routing
	and execution of the liquidity provided by our approved counterparties. The use of this venue aids to our commitment to realise best execution. The top 5 is completed with 5 Counterparties, currently Systemic Internalisers
	Summary of analysis
Execution factors	PGGM defines the best possible result as a proper balance between cost, service and client added value within the existing risk and regulatory frameworks. PGGM takes into account the following factors:
	 Sustainability factors Relationship factors Service consistency Footprint Price Cost of execution Nature and size of the order Speed and likelihood of execution Settlement factors All other relevant factors Cost is determined as total cost. This includes price, and all other costs of execution, such as venue rebates, clearing cost, settlement cost and/or third party execution cost. Best Execution is a process that cannot always be drilled down to a single execution. Elements such as sustainability factors, relationship factors and service consistency need to be monitored and valued over a longer period of time.
Close links, conflicts of interest and	Close links PGGM has no close links with execution venues/brokers that were used to execute orders
common ownership with respect	Conflicts of interest PGGM has no conflicts of interest to report.
to execution venues	Common ownerships PGGM has no common ownership to report.
Specific arrangements with execution venues regarding payments	PGGM has no specific arrangements to report.

made or received, discounts, rebates or non-monetary benefits received	
Factors leading to a change in the list of execution venues listed in the order execution policy	There were no changes to the list of execution venues/brokers in PGGM's Order Execution Policy.
Differentiation across client categories	N/A - all of PGGM's clients are classified as professional clients
Use of data /	PGGM has used the data and/or tools relating to quality of execution coming from:
tools relating	Ovder man average Content
to quality of execution	 Order management System Trading venues
	In house TCA report
	In house Broker review
Use of consolidated tape provider output	PGGM has not used output from consolidated tape providers, as no useful consolidated tape data was available in 2020 for this instrument type.
Use of DEA	No direct electronic access to execution venues we used. The list of the top 5 venues:

Class of Instrument	Interest Rates Derivatives N					
Notification if <1 average trade per business day in the prvious year						
Top 5 Venues in terms of volume (descending	Proportion of volume	Proportion of orders executed	Percentage of	Percentage of	Percentage of	
order)	traded as a percentage of	traded as a percentage of total	passive orders	agressive	directed	
	total in that class	in that class		orders	orders	
XKZZ2JZF41MRHTR1V493						
Citi GML	12,78%	15,14%	na	na	na	
O2RNE8IBXP4R0TD8PU41						
Societe Generale	10,54%	8,01%	na	na	na	
R0MUWSFPU8MPRO8K5P83						
BNP Paribas	10,37%	3,30%	na	na	na	
W22LROWP2IHZNBB6K528						
Goldman Sachs International	8,93%	10,48%	na	na	na	
549300ZK53CNGEEI6A29						
JP Morgan Frankfurt	7,34%	7,18%	na	na	na	

Conclusion

PGGM evaluates both the execution as well as its counterparties along the benchmark of its best execution definition.

To evaluate brokers and counterparties a broker review is used. The 2020 broker review indicates that counterparties used acted in line with PGGM's best execution policy.

Evaluation of transaction is done via a Transaction Cost Analysis (TCA) report. This report evaluates the cost and footprint on a transaction basis as well as over all transactions. The 2020 TCA report indicates that PGGM acted in line with its best execution policy.

An exemption report is set up and is monitored by Compliance. In 2020 no incidents were reported.

Electronic trading platforms are selected on basis of functionality, counterparties connected, liquidity offered and user-friendliness. Periodically PGGM evaluates the offerings available in the market to see if the proper platforms are installed and used. The 2020 evaluation indicates that platforms used meet the requirements in line with PGGM's best execution policy

Class of instrument	Equities
General observations	In 2020 Bloomberg has been the preferred execution venue. This venue is used to route 100% of the orders to brokers execution desks or broker algorithms. It supports an electronic order workflow, it facilitates the products PGGM uses and provides access to all our counterparties. The use of this venue aids to our commitment to realise best execution.
	Summary of analysis
Execution factors	PGGM defines the best possible result as a proper balance between cost, service and client added value within the existing risk and regulatory frameworks. PGGM takes into account the following factors: Sustainability factors Relationship factors Service consistency Footprint Price Cost of execution Nature and size of the order Speed and likelihood of execution Settlement factors All other relevant factors All other relevant factors Best Execution is a process that cannot always be drilled down to a single execution. Elements such as sustainability factors, relationship factors and service consistency need to be monitored and valued over a longer period of time. Monitoring of transactions is done on a trade by trade base.
Close links, conflicts of interest and	Close links PGGM has no close links with execution venues/brokers that were used to execute orders
common	Conflicts of interest
ownership	PGGM has no conflicts of interest to report.
with respect to execution venues	Common ownerships PGGM has no common ownership to report.
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or	PGGM has no specific arrangements to report.

non-monetary benefits received	
Factors leading to a change in the list of execution venues listed in the order execution policy	There were no changes to the list of execution venues/brokers in the PGGM's Order Execution Policy.
Differentiation across client categories	N/A - all of the PGGM's clients are classified as professional clients
Use of data / tools relating to quality of execution	PGGM has used the data and/or tools relating to quality of execution coming from: Order management System Trading venues In house TCA report In house Broker review
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers.
Use of DEA	No direct electronic access to execution venues we used. The list of the top 5 venues: • Tick size liquidity band 1 and 2 (from 0 to 79 trades per day) – Less liquid shares • Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day) – Medium liquid shares • Tick size liquidity bands 5 and 6 (from 2000 trades per day) – Highly liquid shares

Class of Instrument	Equities - Shares & Depositary Receipts tick size liquidity bands 1 and 2 N					
Notification if <1 average trade per business day in the prvious year						
Top 5 Venues in terms of volume (descending order)	Proportion of volume traded as a percentage of	Proportion of orders executed traded as a percentage of total	Percentage of passive orders		Percentage of directed	
order)	total in that class	in that class	passive orders	orders	orders	
XSWM						
Six Swiss Exchange	15,84%	3,44%	na	na	na	
XTKS						
The Tokyo Stock Exchange	15,47%	1,33%	na	na	na	
XVTK						
Six Swiss Exchange (VTX)	12,31%	1,22%	na	na	na	
XNAS						
Nasdaq	9,75%	4,55%	na	na	na	
XSWX						
Swiss Exchange	9,50%	3,22%	na	na	na	

Class of Instrument	Equities - Shares & Depositary Receipts tick size liquidity bands 3 and 4					
Notification if <1 average trade per business day						
in the prvious year	N					
Top 5 Venues in terms of volume (descending	Proportion of volume	Proportion of orders executed	Percentage of	Percentage of	Percentage of	
order)	traded as a percentage of	traded as a percentage of total	passive orders	agressive	directed	
	total in that class	in that class		orders	orders	
XTKS						
The Tokyo Stock Exchange	33,49%	4,41%	na	na	na	
TRQM						
Turquiose Plato London	12,74%	5,79%	na	na	na	
XAMS						
Euronext Amsterdam	9,82%	6,61%	na	na	na	
XMAD						
Bolsa de Madrid	7,38%	1,38%	na	na	na	
XPOS						
Posit Dark Dublin	6,61%	4,13%	na	na	na	

Class of Instrument	Equities - Shares & Depositary Receipts tick size liquidity bands 5 and 6 N					
Notification if <1 average trade per business day in the prvious year						
Top 5 Venues in terms of volume (descending	Proportion of volume	Proportion of orders executed	Percentage of	Percentage of	Percentage of	
order)	traded as a percentage of	traded as a percentage of total	passive orders	agressive	directed	
	total in that class	in that class		orders	orders	
XNAS						
Nasdaq	9,64%	2,80%	na	na	na	
TRQM						
Turquiose Plato London	6,69%	3,48%	na	na	na	
XPAR						
Euronext Paris S.A	5,05%	1,54%	na	na	na	
XNYS						
New York Stock Exchange	4,80%	2,39%	na	na	na	
CHID						
CBOE EUROPE London	4,18%	3,32%	na	na	na	

Conclusion

PGGM evaluates both the execution as well as its counterparties along the benchmark of its best execution definition.

To evaluate brokers and counterparties a broker review is used. The 2020 broker review indicates that counterparties used acted in line with PGGM's best execution policy.

Evaluation of transactions is done with Transaction Cost Analysis (TCA). This report evaluates the costs on a transaction basis. For 2020 PGGM acted in line with its best execution policy.

An exemption report is set up and is monitored by Compliance. In 2020 no incidents were reported.

Electronic trading platforms are selected on basis of functionality, counterparties connected, liquidity offered and user-friendliness. Periodically PGGM evaluates the offerings available in the market to see if the proper platforms are installed and used. The 2020 evaluation indicates that platforms used meet the requirements in line with PGGM's best execution policy.

Class of instrument	Credit Derivatives (CDS)
General observations	In 2020 all CDS trades have been executed with Barclays Capital. This counterparty best suited our requirements. Positions have been closed with the same counterparty to avoid novation costs.
	Summary of analysis
Execution factors	PGGM defines the best possible result as a proper balance between cost, service and client added value within the existing risk and regulatory frameworks. PGGM takes into account the following factors:
	 Sustainability factors Relationship factors Service consistency Footprint Price Cost of execution
	 Nature and size of the order Speed and likelihood of execution Settlement factors All other relevant factors
	Best Execution is a process that cannot always be drilled down to a single execution. Elements such as sustainability factors, relationship factors and service consistency need to be monitored and valued over a longer period of time. Monitoring of transactions is done on a trade by trade base.
Close links, conflicts of interest and	Close links PGGM has no close links with execution venues/brokers that were used to execute orders
common ownership	Conflicts of interest PGGM has no conflicts of interest to report.
with respect to execution venues	Common ownerships PGGM has no common ownership to report.
Specific arrangements with execution venues regarding	PGGM has no specific arrangements to report.
payments made or received, discounts, rebates or	

		100,0070	200,00%				
	BARCLAYS CAPITAL G5GSEF7VJP5I7OUK5573	100,00%	100,00%	na	na	na	
	DADCI AVC CADITAL	total in that class	in that class		orders	orders	
	order)	traded as a percentage of	traded as a percentage of total	passive orders	agressive	directed	
	Top 5 Venues in terms of volume (descending	Proportion of volume	Proportion of orders executed	_	_	_	
	in the prvious year						
	Notification if <1 average trade per business day	N N					
	Class of Instrument	Credit derivatives					
Use of DEA	No direct electronic access to execution venues we	used. The list of the top 5 venues:					
Use of consolidated tape provider output	The Firm has not used output from consolidated tap	n has not used output from consolidated tape providers.					
to quality of execution	 Order management System Trading venues In house TCA report In house Broker review 						
Use of data / tools relating	PGGM has used the data and/or tools relating to quality of execution coming from:						
across client categories							
Differentiation	N/A - all of the PGGM's clients are classified as prof	essional clients					
execution policy							
execution venues listed in the order							
leading to a change in the list of			,				
Factors	There were no changes to the list of execution venu	es/brokers in the PGGM's Or	der Execution Policy.				
non-monetary benefits received							

Conclusion

PGGM evaluates both the execution as well as its counterparties along the benchmark of its best execution definition.

To evaluate brokers and counterparties a broker review is used. The 2020 broker review indicates that counterparties used acted in line with PGGM's best execution policy.

Evaluation of transactions is done with Transaction Cost Analysis (TCA). This report evaluates the costs on a transaction basis. For 2020 PGGM acted in line with its best execution policy.

An exemption report is set up and is monitored by Compliance. In 2020 no incidents were reported.

Electronic trading platforms are selected on basis of functionality, counterparties connected, liquidity offered and user-friendliness. Periodically PGGM evaluates the offerings available in the market to see if the proper platforms are installed and used. The 2020 evaluation indicates that platforms used meet the requirements in line with PGGM's best execution policy

Class of instrument	Currency derivatives					
General observations	In 2020 Bloomberg has been the preferred execution venue. This venue is one of the leading execution venues for FX. It supports an electronic order workflow, it facilitates the products PGGM uses and provides access to all our counterparties. The use of this venue aids to our commitment to realise best execution.					
	Summary of analysis					
Execution factors	PGGM defines the best possible result as a proper balance between cost, service and client added value within the existing risk and regulatory frameworks. PGG takes into account the following factors: Sustainability factors Relationship factors Service consistency Footprint Price Cost of execution Nature and size of the order Speed and likelihood of execution Settlement factors All other relevant factors Best Execution is a process that cannot always be drilled down to a single execution. Elements such as sustainability factors, relationship factors and service consistenced to be monitored and valued over a longer period of time. Monitoring of transactions is done on a trade by trade base.					
Close links, conflicts of interest and	Close links PGGM has no close links with execution venues/brokers that were used to execute orders					
common	Conflicts of interest					
ownership with respect	PGGM has no conflicts of interest to report.					
to execution venues	Common ownerships PGGM has no common ownership to report.					
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary	PGGM has no specific arrangements to report.					

benefits received						
Factors leading to a change in the list of execution venues listed in the order execution policy	There were no changes to the list of execution vent	ues/brokers in the PGGM's C	Order Execution Policy.			
Differentiation across client categories	N/A - all of the PGGM's clients are classified as professional clients					
Use of data / tools relating to quality of execution	PGGM has used the data and/or tools relating to quality of execution as follows: WM Reuters benchmark data NewChange FX benchmark data General market data Broker provided market structure data					
Use of consolidated tape provider output	The Firm has not used output from consolidated ta	pe providers.				
Use of DEA	No direct electronic access to execution venues we used. The list of the top 5 venues:					
	Class of Instrument	Currency Derivatives				
	Notification if< 1 average trade per business day in the previous year	N N				
	Top 5 Venues ranked in terms of volume (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
	BMTF Bloomberg	100,00%	100,00%	na	na	na
Conclusion	PGGM evaluates both the execution as well as its of the evaluate brokers and counterparties a broker repolicy.				l acted in line with P	GGM's best executior

Evaluation of transaction is done via a Transaction Cost Analysis (TCA) report. This report evaluates the cost and footprint on a transaction basis as well as over all transactions. The 2020 TCA report indicates that PGGM acted in line with its best execution policy.

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Electronic trading platforms are selected on basis of functionality, counterparties connected, liquidity offered and user-friendliness. Periodically PGGM evaluates the offerings available in the market to see if the proper platforms are installed and used. The 2020 evaluation indicates that platforms used meet the requirements in line with PGGM's best execution policy

Data from several sources has been used to evaluate the execution quality. The results indicate that PGGM acted in line with its best execution policy during 2020.

Class of instrument	Futures					
General observations	In 2020 all futures haven traded on the Chicago Board of Trade and Eurex.					
	Summary of analysis					
Execution factors	PGGM defines the best possible result as a proper balance between cost, service and client added value within the existing risk and regulatory frameworks. PGGM takes into account the following factors: Sustainability factors Relationship factors Service consistency Footprint Price Cost of execution Nature and size of the order Speed and likelihood of execution Settlement factors All other relevant factors Best Execution is a process that cannot always be drilled down to a single execution. Elements such as sustainability factors, relationship factors and service consistency need to be monitored and valued over a longer period of time. Monitoring of transactions is done on a trade by trade base.					
Close links, conflicts of interest and	Close links PGGM has no close links with execution venues/brokers that were used to execute orders					
common ownership	Conflicts of interest PGGM has no conflicts of interest to report.					
with respect to execution venues	Common ownerships PGGM has no common ownership to report.					
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary	PGGM has no specific arrangements to report.					

Conclusion	PGGM evaluates both the execution as well as its co	ounterparties along the bench	mark of its best execution definition	1.			
	EUREX Deutschland	20,09%	17,31%		na	na	
	XEUR						
	Chicage Board of Trade	79,91%	82,69%	na	na	na	
	XCBT						
		total in that class	in that class	-	orders	orders	
	order)	traded as a percentage of	traded as a percentage of total	passive orders	_	directed	
	Top 5 Venues in terms of volume (descending	Proportion of volume	Proportion of orders executed	Percentage of	Percentage of	Percentage of	
	in the prvious year		N				
	Notification if <1 average trade per business day						
	Class of Instrument	Futures					
Use of DEA	No direct electronic access to execution venues we u	cution venues we used. The list of the top 5 venues:					
Use of consolidated tape provider output	The Firm has not used output from consolidated tap	pe providers.					
Use of data / tools relating to quality of execution	PGGM has used the data and/or tools relating to quality of execution coming from: Order management System Trading venues In house TCA report In house Broker review						
Differentiation across client categories	N/A - all of the PGGM's clients are classified as prof						
leading to a change in the list of execution venues listed in the order execution policy							
Factors	There were no changes to the list of execution venues/brokers in the PGGM's Order Execution Policy.						
benefits received							

To evaluate brokers and counterparties a broker review is used. The 2020 broker review indicates that counterparties used acted in line with PGGM's best execution policy.

Evaluation of transactions is done with Transaction Cost Analysis (TCA). This report evaluates the costs on a transaction basis. For 2020 PGGM acted in line with its best execution policy.

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