

Please make sure to submit all final responses via the online version of the RCA.

Trading and/or Execution and/or Clearing

This section is intended to help us better understand the risks and mitigating controls associated with your Trading, Execution, and/or Clearing business. Please respond to this section if your firm reported revenue in fiscal year 2014 in any of the following areas:

- "Gains or Losses on Derivative Trading Desks", "Net Gains or Losses on Principal Trades", Capital Gains (Losses) on Firm Investments and/or "Interest/Rebate/Dividend Income", "Execution Services" and/or the "Clearing Services" sections of the Supplemental Statement of Income (line items 13906 or 13950 or 13952 or 11069 or 11096 or 11097 respectively), or;
- If these represent material aspects of your overall business

This section has also been categorized into 15 brief subsections.

Which products does your firm trade?					
Select all that apply.					
	Principal	Agency			
Equities					
Futures					
Foreign Exchange					
Fixed Income					
Options					
Other					
Optional comments/additional products?					



Subsection 1: Monitoring of trading positions, P&L, credit risk

Does an individual/department independent of the trading desk monitor position limits?							
Select one per row.							
				Yes	No	N/A	
	Eq	uities		0	0	0	
	Ор	tions		0	0	0	
Other (Fixed Inco	ome, Fore	ign Exchange, Futur	es, etc.)	0	0	0	
Optional comments:						1	
Describe what have an au		l limita and bus a dead					
Describe what happens when the control of the contr	nen forma	i ilmits are breached	•				
						-	
Does an individual/departr			g desk monitor the	e daily p	rofit-ar	nd-loss	
Select one per row.	(P&L) fluctuations at the desk level?						
		Yes	No		N/A		
Equities		0	0		0		
Options		0	0		0		
Other	Other O O						
						•	
Does your firm have explic product classes to an indiv			respect to the tot	al expos	sure ac	ross all	
Select one.							
0	Yes						
0	No						
0	N/A						



Optional comments:	ar madsery r	guiatory Authority		
Does your firm have level?	explic	credit limits established with respect to	the total	exposure on a desk
Select one.				
0		/es		
0		No		
0		N/A		
Ontional comments:				
Optional comments:				
Does your firm have trader level?	explic	limits established with the total market e	exposure	e at an individual
Select one.				
0		· res		
0		No		
0		N/A		
Optional comments:				
Does your firm make	marg	loans to clients?		
Select one.				
0	Yes			
0	No			

If No, skip the next three (3) questions.



□ No

	Financi	al Industry Regulatory Authority	
Does yo	our firm recei	e or produce information about the risk of margin loan	s made to clients?
Select	one.		
	0	Yes	
	0	No	
If Yes, a	answer the ne	ext question.	
Does you		ve or produce information about the risk of the margin	oans made to
Select a	all that apply.		
□ In	formation is r	eceived from clearing firm(s)	
□ W	/e generate o	ur own reports	
	ther:		
	•	firm review and react to margin loan credit limit violati	ons?
How off	•	firm review and react to margin loan credit limit violation	ons?
	•	<u>-</u>	ons?
Select	one.	most never	ons?
Select	one. Never or al	most never	ons?
Select	Never or al Occasional	most never	ons?
Select	Never or al Occasional Daily	most never	ons?
Select (Never or al Occasional Daily Other:	most never	ons?
Select (Never or al Occasional Daily Other:	most never	ons?
Select of O	Never or al Occasional Daily Other: Our firm have	most never	ons?
Select (Never or al Occasional Daily Other: Our firm have	most never	ons?
Select of O	Never or al Occasional Daily Other: Our firm have	most never ly an internal risk model validation group?	ons?



Subsection 2: Monitoring of Trading Practices and Outside Trading Accounts

How do	oes the firm monitor for trading ahead/supervision of customer orders?
Select	all that apply.
	System Controls
	Policies and Procedures
	Account Monitoring
	Email/IM Monitoring
	Exception Report Reviews
	Not monitored
	Other - Please specify:
	N/A



		ntrols does the firm employ to monitor for manipulative trading activity ted to front-running, wash sales, layering, marking the close, etc.?
	all that apply.	
	System Con	trols
	Policies and	Procedures
	Account Mo	nitoring
	Email/IM Mo	nitoring
	Exception R	eport Reviews
	Not monitore	ed
	Other - Plea	se specify:
	N1/A	
	N/A	
		upervise for customer accounts trading on non-public information?
	all that apply.	
	Physical Bar	
	Electronic B	
	Policies and	
	Account Mo	<u> </u>
	Email/IM Mo	-
	· ·	eport Reviews
	No Controls	
	Other - Plea	se specify:
	N/A	
	•	
Does t	the firm permit	trading in Outside Brokerage Accounts for its staff?
Select	one.	
	0	Yes
	0	No
Option	nal comments:	

If Yes, answer the next question.



How does the firm supervise trading in Outside Brokerage Accounts for trading in restricted securities, material non-public information, and manipulation?						
Select	all that apply.					
	Policies and Procedures					
	Account Monitoring					
	Email/IM Monitoring					
	Exception Report Reviews					
	Not monitored					
	Other:					
	N/A					
. <u> </u>	Subaga	tion 2: Aggregation	a Unita			
	Subsec	tion 3: Aggregation	1 Units			
	which of the following dimension texposure (select all that apply)		ve the ability to ag	gregate daily		
	at least 1 choice.	· ·				
	ounterparty					
□ De						
	sition					
-	ader					
\vdash	her (please specify):					
	ner (piedoc specify).					
□ Th	e firm does not have the ability	to aggregate daily cu	rrent exposures			
Does y	our firm maintain multiple desk	s that trade equities?				
Select	one per row.					
		Yes	No	N/A		
	Agency	0	0	0		
	Principal O O					
	<u>'</u>	•				
Option	al comments:					



Does your firm maintain multiple desks that trade options?					
Select one per row.					
	Ye	s	No	N/A	
Agency	0		0	0	
Principal	0		0	0	
Ontional comments					
Optional comments:					
Does your firm use aggregation	on units?				
Select one.					
O Yes					
O No	O No				
O N/A					
If Yes, answer the remainder	of the questions in	this section.			
Optional comments:					
Do any of the aggregation uni	ts include multiple	trading dasks	?		
Select one.	to morade maniple	iraamig acoko	•		
O Y6	es				
O No					
O N/					
Optional comments:					



Do any of the aggregation units trad	Do any of the aggregation units trade on a principal basis?					
Select one per row.						
	Yes	No	N/A			
Equities	0	0	0			
Options	0	0	0			
Other	0	0	0			
Ontional community						
Optional comments:						
Does your firm maintain aggregation Select one.	units that trade strict	ly on a proprietary	/ basis?			
O Yes						
O No						
O N/A						
Optional comments:						
Through which of the following comicommunication (select all that apply		does your firm allo	w internal			
Select all that apply.						
□ Email						
☐ Chat room	□ Chat room					
☐ Text Message (SMS, iMessage	☐ Text Message (SMS, iMessage, etc.)					
□ Instant Message						
☐ Telephonic						
Other (please specify):						
□ None of the above						



How does the firm supervise against information sharing between Aggregation units or desks?					
Select all	that apply.				
□ Pł	hysical Bar	riers			
	ectronic Ba	arriers			
	olicies and	Procedures			
□ Pł	hysical Mo	nitoring			
□ Er	mail/IM Mo	nitoring			
	xception R	eport Reviews			
	ther - Plea	se specify:			
□ N/	/A				
		Subsecti	on 4: Market Acces	s Questions	
Doos vour	firm provid	de market acce	no convicce?		
Select one	•	de market acce	55 SELVICES !		
)	Yes			
)	No			
If Yes, ans	swer the ne	ext question. If I	No, proceed to Subse	ction 5.	
Does your	firm provid	de market acce	ss to your clients or o	ther broker-dealer	s?
Select one			•		
			Yes	No	N/A
	Equitie	es	0	0	0
	Option	S	0	0	0
	Other O O				
-		ve market acces	ss from other parties of	or broker-dealers?	
Select one	e per row.				1
			Yes	No	N/A
	Equitie	es	0	0	0
	Option	S	0	0	0
	Other		0	0	0



	oes the firm med market according		for manipulative activity in customer accounts that	at have been	
•	all that apply.				
	System Con	trols			
	Policies and	Proce	edures		
	Account Mor	nitorin	g		
	Email/IM Mo	nitorii	ng		
	Exception R	eport	Reviews		
	No Monitorin	ng			
	Other - Pleas	se sp	ecify:		
	N/A				
Does the access	s?	erron	eous activity in customer accounts that have been	n provided market	
	0		Yes		
	0		No		
		9	Subsection 5: Order Routing and Marking		
Does to	he firm's order	r mark	ing take into account the following?:		
Select	all that apply.				
	Executed Buy	/ Orde	ers		
	Executed Sel	l Orde	ers		
	Open (unexe		•		
	Open (unexe		Sell Orders		
	Canceled Ord				
	□ None of the above				
Does tl	he firm receive	e reba	tes from Exchanges for routing orders there?		
Select					
	0	Yes			
	0	No			
	0	N/A			

If Yes, answer the next question.



	Financia	il industry Regulatory Authority				
		firm employ to regularly and rigorously assess the qualid customer orders?	ty of executions			
Select						
0	Best Executi	on Committee				
0	Execution Re	eports				
0	Vendor Prov	ided Reports				
0	Exception Re	eports				
0	None					
0	Other - Pleas	se Specify:				
0	N/A					
	14// (
	Sub	section 6: Indications of Interest (IOI) Communicati	ions			
		nunicate or advertise proprietary or customer trading int st" to the marketplace?	erest in the form of			
Select o	one.					
	0	Yes				
	0	No				
	0	N/A				
If Yes, a	answer the ne	ext question.				
· 		<u> </u>				
		g methods of communication does your firm use to com st" (select all that apply)?	nmunicate			
	all that apply.	(Sciect all that apply):				
	mail					
		(SMS, iMessage, etc.)				
	nstant messa					
l 						
	Other (please	specify):				
		Subsection 7: Options Order Solicitation				
		Subsection 1. Options Order Solicitation				



Financial Industry	Regulatory Autho	rity			
Does your firm solicit customer option orders?					
Select one.					
0	Yes				
0	No				
0	N/A				
Does your firm receive so	licitations f	or option orders?			
Select one.	T				
0	Yes				
0	No				
0	N/A				
				_	
Does your firm facilitate co	ustomer of	otion orders from a pro	oprietary account?	·	
Select one.	1				
0	Yes				
0	No				
O N/A					
Ouds a set	O. 11-	Id Onders Messel O			
Subsect	ion 8: He	eld Orders, Manual O	raers, "Net" Ora	ers	
Does your firm accept held	d custome	r orders?			
Select one per row.	<u></u>				
		Yes	No	N/A	
Equities		0	0	0	
Options		0	0	0	
Other					
Optional comments:					
				!	



What approxima orders?	ate percent	tage of your firm's equity orders are handled as held customer					
Select one.							
0	0-25%						
0	25-50%						
0	50-75%						
0	75-100%	75-100%					
0	N/A						
Optional comme	ents:						
Does vour firm h	nandle mai	nual option orders?					
Select one.							
0		Yes					
0		No					
0		N/A					
Optional comme	ents:						
		ers on a "net" basis that incorporates a markup, markdown, other change in the limit order price?					
Select one.							
0		Yes					
0		No					
0		N/A					
Optional comme	ents:						

Subsection 9: Algorithmic Trading



Does the firm or any or	of its desks/trac	ders employ automate	ed trading strategie	es?
Select one.				
0	Yes			
0	No			
If No, proceed to Subs	section 10 – A	Iternative Trading Sys	etem (ATS).	
Describe the types of	automated tra	ding strategies the firr	m employs.	
How many employees	does the firm	employ for the autom	nated trading unit/b	ousiness?
Does the firm service strategies?	any customers	s, broker-dealers, or a	ffiliates that emplo	by automated trading
Select one.				
0	Yes			
0	No			
Optional comments:				
Are automated trading all that apply)?	g algorithms m	aterial to your busines	ss in any of the fol	lowing areas (select
Select one per row.				
		Yes	No	N/A
Equities	3	0	0	0
Options		0	0	0
Other		0	0	0



Does yo		e its proprietary	algorithms available to	o its customers ar	nd/or other broker-	
Select o	one.					
	0	Yes				
	0	No				
	0	N/A				
If Yes, a	answer the n	ext question.				
Describ dealers.		of proprietary alg	orithms made availab	le to customers a	nd/or other broker-	
	algorithms th g strategy lev		ur firm's automated tra	ding strategies cl	early documented at	
Select o	ne.					
0	Yes					
0	No					
0	Other - Ple	ase specify:				
Have vo	our firm's trac	ding algorithms l	peen tested under var	ious stress scena	rios?	
	ne per row.					
			Yes	No	N/A	
	Equitie	es	0	0	0	
	Option	าร	0	0	0	
	Othe	r	0	0	0	
_						
Describ	e the testing	process for algo	orithms prior to deploy	ment.		



	development, test ed by the same in	ing, deployment, and modification of new and existing technologies dividual?
Select c		
	0	Yes
	0	No
	0	N/A
Ontiona	I comments:	
Ориона	i comments.	
		d validate its trading technology initiatives, including but not limited to software, hardware, and other trading tools prior to rolling them into
producti		software, flardware, and other trading tools prior to folling them into
Select a	all that apply.	
□ Us	ser Acceptance Te	esting (UAT)
□ Of	fline Testing	
□ Те	esting under non-n	ormal market conditions
□ Ex	ception Reports	
	her - Please spec	fy:
How ofte	en does the firm c	onduct testing of its algorithms in production to ensure they are
	ing as intended?	
Select c	one.	
0	Weekly	
0	Monthly	
0	Quarterly	
0	Annually	
0	Other - Please sp	pecify:



How do	oes the firm su	pervise for abusive/manipulative trading by users of it	s algorithms?		
Select	all that apply.				
	System Controls				
	Policies and Procedures				
	Account Mo	nitoring			
	Email/IM Mo	nitoring			
	Exception R	eport Reviews			
	Other - Plea	se specify:	1		
Which	users of this t	echnology do the supervisory reviews cover?			
	all that apply.	comining as the supervisor, remains sever.			
	Traders				
	Customers				
	Employees				
	Ownership				
	Affiliates				
	Other - Plea	ase specify:			
		Subsection 10: Alternative Trading System (ATS)			
		Subsection 10. Alternative Trading System (ATS)			
Does y	our firm opera	ate an Alternative Trading System?			
Select	one.				
	0	Yes			
	0	No			
If Yes,	If Yes, answer the next three (3) questions.				
Please	provide a bre	akdown of ATS subscribers:			
		Retail %:			
		Institutional %:			
		Broker Dealers %:			
		Affiliates %:			
		Total:	100		



Please provide a breakdov	wn of auto	mated trading strateg	y order flow within	the AT	S:
Internal traders %:					
External traders/firms/individuals %:					
				Total:	100
					=
Does your firm trade princ	ipally with	n your alternative trac	ding system/dark p	0001?	
Select one per row.		Yes	No		N/A
F					
Equities		0	0		0
Options		0	0		0
Other		0	0		0
Subsection 11:	Exempti	ons from publishing	order execution	statist	ics
Does your firm claim the S statistics pursuant to SEC Select one.			from having to pub	olish ord	ler execution
0	Yes				
0	No				
0	N/A				
Optional comments:					
Does your firm claim an ex					
SEC Rule 605 based on b	eing a ma	rket center only for in	lactively traded se	curilles	!
O	Yes				
0	No				
0	N/A				
Optional comments:	<u> </u>				I



	gun publishing orderss(es) within the la				
Select one.					
0	Yes				
0	No				
0	N/A				
If Yes, answer the	e next question.				
	he newly establish orincipal trading, et	ed trading desk(s) anc.).	d/or business line	(s) (ATS, market-	
	Subsect	ion 12: Payment fo	r order flow		
		s to pay other broker-		order flow (with	
	aintain agreements n-cash compensati	s to pay other broker-		order flow (with	
either cash or nor	aintain agreements n-cash compensati	s to pay other broker-		order flow (with	
either cash or nor Select one per ro	aintain agreements n-cash compensati	s to pay other broker- on)?	dealer entities for	· I	
either cash or nor Select one per ro Equ	aintain agreements n-cash compensati w.	s to pay other broker- ion)? Yes	dealer entities for o	N/A	
either cash or nor Select one per ro Equ	aintain agreements n-cash compensati w. uities	s to pay other broker- on)? Yes O	dealer entities for o	N/A O	
either cash or nor Select one per ro Equ	aintain agreements n-cash compensati w. uities tions	yes O	No O	N/A O O	
either cash or nor Select one per ro Equ Opt Ot Does your firm ma	aintain agreements n-cash compensati w. uities tions ther aintain reciprocal o	yes O	No O O O O O O O O O O O O O O O O O O O	N/A	
either cash or nor Select one per ro Equ Opt Ot Does your firm ma	aintain agreements n-cash compensati w. uities tions ther aintain reciprocal cin exchange for ore	Yes O Order flow arrangemen	No O O O O O O O O O O O O O O O O O O O	N/A	
either cash or nor Select one per ro Equ Opt Ot Does your firm ma	aintain agreements n-cash compensati w. uities tions ther aintain reciprocal cin exchange for ore	Yes O Order flow arrangemen	No O O O O O O O O O O O O O O O O O O O	N/A	
either cash or nor Select one per ro Equ Opt Ot Does your firm manother member is	aintain agreements n-cash compensati w. uities tions ther aintain reciprocal cin exchange for ore	Yes Order flow arrangement of the other	No O O O O O O O O O O O O O O O O O O O	N/A O O O om sends orders to	
Equation of the select one per role of the selec	aintain agreements n-cash compensati w. uities tions ther aintain reciprocal coin exchange for ord	Yes Order flow arrangement of the other states	No O O O O O O O O O O O O O O O O O O O	N/A O O O The sends orders to	



Does your firm maintain agreements to send its orders to other broker-dealers for which the firm receives payment for order flow (with either cash or non-cash compensation)? Select one per row. Yes No N/A **Equities** 0 0 0 **Options** 0 0 0 0 0 0 Other Does your firm receive payment from other broker-dealers for being a liquidity provider? Select one. Yes 0 0 No 0 N/A Does your firm maintain agreements to pay other broker-dealer entities to provide liquidity? Select one. Yes 0 0 No N/A 0 Optional comments: **Subsection 13: Clearing Services** Does your firm have a clearing business? Select one per row. No Yes **Equities** 0 0 **Options** 0 0 0 0 Other

If Yes to any of the choices above, answer the remaining questions in this section. If No to all choices above, then proceed to Subsection 14.



Continual comments:
Optional comments:
In which of the following clearing-related activities does your firm engage (select all that apply)?
Select at least 1 choice.
□ Collateral transformation services
□ Correspondent clearing services
□ Securities lending
☐ Other (please specify):
□ N/A
What process does your firm have to approve material margin loans (> 1% of Total Regulatory
Capital)?
Select all that apply.
Decentralized (e.g.: Approved by registered representatives, branch office managers, margin clerk)
Centralized (i.e. Approved at the supervisory level (e.g.: Head of Margin, Financial Principal)
Approved by top firm officials (e.g.: CFO, CRO, Committee of Officers)
□ None
Other - Please specify:
How often does your firm review minimum "house" requirements?
Select all that apply.
□ We do not set house requirements
☐ The requirements were set once
☐ The requirements are reviewed as needed
☐ The requirements are reviewed on a regular basis
□ N/A



	espect to wholesale lending (e.g. derivative transactions, prime brokerage) does your firm process in place to set counterparty credit limits?						
	Select all that apply.						
	No						
	Yes – by each counterparty						
	☐ Yes – by each loan						
	Other - Please specify:						
	N/A						
How of	ften does your firm stress test margin lending collateral?						
	all that apply.						
	Never or almost never						
	Monthly						
	Daily						
	Intra-day						
	N/A						
What p	process does your firm have to approve new material counterparties?						
Select	all that apply.						
	None						
	Credit checks						
	Financial statement review						
	News event review						
	Other - Please specify:						
	N/A						
	14/1						
How of	ften does your firm review the creditworthiness of existing counterparties?						
	all that apply.						
	Never						
	Annually						
	Monthly or more frequently						
	N/A						



Optional comments:					
Subsection 14:	Execution Servi	ces			
Does your firm have an execution business?					
Select one per row.					
	Yes			No	
Equities	0			0	
Options	0			0	
Other	0			0	
Optional comments:					
In which of the following execution-related activ	vities does your fi	rm engag	e (select a	all that	
apply)?					
Select all that apply.					
		Equities	Options	Other	N/A
Alternative trading system/dark por					
Electronic communications network (ECN) / Elect	ronic executions				
Exchange market maker					
Exchange non-floor broker					
Execution on an agency basis					
Execution on a principal basis					
Execution on a proprietary basis					
Floor broker					
Intermediary for foreign brokers					
Market access					
OTC/OTCBB market maker					
Sponsored access					



Financial Industry Regulatory Authority				
Please describe any s	elections in the "Other" category.			
	e Execution Consulting services for institutional customers?			
Select one.				
0	Yes			
0	No			
	Subsection 15: Other Questions			
Does your firm provide	e or perform any of the following roles?			
Select all that apply.	yor perform any or the following folco.			
	zed Participant for ETFs?			
	naker for exchange-traded products like ETFs?			
Act as a Market II	laker for exchange-traded products like ETFS:			
Answer the following of	question if your firm trades fixed income products.			
How do you price fixed	d income products?			
Select all that apply.				
☐ Internal system				
□ We use one thir	d party service			
□ We use multiple	e third party services			
□ N/A				
<u>LL</u>				
If response to above of	question is internal system or N/A, skip the next question.			
Please indicate name	or names of third party service used to price fixed income products.			
1.1				