

The Honorable Gary Gensler
Chairman
Commodities Futures Trading Commission
Three Lafayette Centre
1155 21st Street NW
Washington, DC 20581

Cc: Ananda Radhakrishnan
Sarah Josephson

Dear Chairman Gensler,

Thank you very much for seeing us and taking some of your time to consider our new idea on how to address systemic risk issues. As discussed in the meeting, I hereby send you a written explanation of what we are proposing and why it is important in order to reach the ultimate policy goal of increased financial stability.

First I would like to quote the declaration from the September 2009 G20 meeting in Pittsburgh :

*“All standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest. OTC derivative contracts should be reported to trade repositories. Non-centrally cleared contracts should be subject to higher capital requirements. We ask the FSB and its relevant members to assess regularly implementation and whether it is sufficient to improve transparency in the derivatives markets, **mitigate systemic risk**, and protect against market abuse.”*

We interpret this statement as saying that one of the G20 objectives is to mitigate systemic risk and that the actions described initially are the means toward that end. The systemic risk reducing objective is also a key part of both the Dodd-Frank Act as well as the European Market Infrastructure Regulation (EMIR).

In Dodd-Frank, there is a statutory requirement for the CFTC to take the following into account in the determination of the clearing requirement for a given class of swaps:

*“(III) The effect on the **mitigation of systemic risk**, taking into account the size of the market for such contract and the resources of the derivatives clearing organization available to clear the contract.”*

EMIR, article 3, point 4 states:

TriOptima AB
PO Box 182
101 23 Stockholm
Sweden

Tel +46 8 545 25 130
Fax +46 8 545 25 140
Company reg no. 556584-9758

Courier address: Blekholmsgatan 2F
111 64 Stockholm
Visiting address: Klarabergsviadukten 63



“With an **overarching aim of reducing systemic risk**, the draft regulatory technical standards for the part referred to in paragraph 2(a) shall take into consideration the following criteria:

- (a) the degree of standardisation of the contractual terms and operational processes of the relevant class of OTC derivative contracts;
- (b) the volume and the liquidity of the relevant class of OTC derivatives;
- (c) the availability of fair, reliable and generally accepted pricing information in the relevant class of OTC derivatives;”

Systemic risk

There are indeed many factors that contribute to systemic risk and many different ways of mitigating it. We would like to distinguish between methods that truly reduce the risk from methods that mitigate the risk. In our view, margins and capital mitigate risk by building up financial buffers to absorb losses if and when they occur. An alternative approach would be to reduce the risk of loss in the first place, and indeed many of our services are focused on this approach.

The risk of loss after a default is partly caused by any unsecured exposure the survivors have and partly due to potential losses from adverse market movements before the risk in the defaulted portfolio can be hedged. The current exposure is normally secured by variation margin or collateral. By implementing stringent requirements on margining practices, as is the case in a CCP, it should be possible to contain this risk of “static” losses quite effectively. The “potential loss” risk is normally secured by initial margins and capital. This risk is, however, of a more dynamic nature. Whether or not the initial margins/capital will suffice is dependent on how severe the market movements are after a default. Furthermore, any sizeable hedging activities following a default are likely to be difficult and in fact increase the stress on the market. In our view, it is the “potential loss” risk, more than anything else that contributes to the interconnectedness in the market and the risk of contagion, two key elements of systemic risk. It is exactly this “potential loss” risk that our new service triBalance will reduce – not *mitigate*, but *reduce*.

The risk rebalancing service we are proposing will give financial institutions the tools necessary to **manage portfolio risk pro-actively on an industry wide basis**. It will be a tool enabling financial institutions to **clear the risk from non-clearable transactions**. Reducing bilateral and CCP risk exposures will positively impact systemic stability by:

- reducing the volatility of portfolio values and potential future exposure;
- reducing collateral transfers caused by market movements;
- reducing disputes caused by portfolio valuation differences;
- minimizing the market impact of a default;
- reducing the pro-cyclicality of margin and capital requirements;
- reducing the liquidity drain caused by initial margin requirements.

How it works

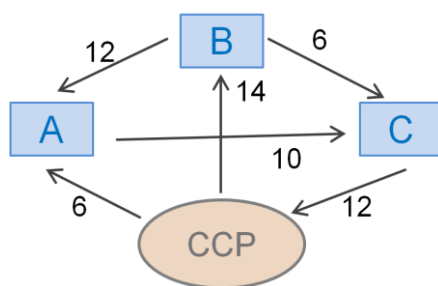
The key to understanding the mechanism at work in our risk rebalancing service is to realize that portfolio risk will be positive in roughly half the relationships and negative in the other half. By “portfolio risk” we mean the sensitivity to market movements in a given “netting set”, where a netting set is either all the trades margined jointly between a bank and a CCP or all the trades netted under the same master agreement between two banks. This means that it is possible to bring together a number of participants and effectuate a “portfolio risk transferring transaction” between them without changing the overall market risk for any of them. The positive and the negative changes in the various portfolios net out to zero, but the portfolio risk for each individual relationship (whether bilateral or versus a CCP) can be reduced in absolute terms.

Example

To illustrate how the risk rebalancing methodology works, we present a simple theoretical example with only three banks and one CCP. We are focusing on just one of the portfolio risk sensitivities, in this case the sensitivity (i.e. how much the mark-to-market value of the portfolio would change) to a one basis point move (pv01) of the 10 year USD swap rate. (In real life the service will simultaneously reduce all risk sensitivities with sufficiently high correlation and magnitude, which in most cases will cover the entire USD and EUR curves, and possibly the GBP and JPY curves as well).

Assume that there are the following initial risk sensitivities in the various relationships. The risks in the bilateral relationships emanate from **non-clearing eligible** OTC derivatives.

Illustration & table 1: Initial risk positions (pv01)



pv01	A	B	C	CCP	Net	Sum Abs
A	0	12	-10	6	8	28
B	-12	0	-6	14	-4	32
C	10	6	0	-12	4	28
CCP	-6	-14	12	0	-8	32

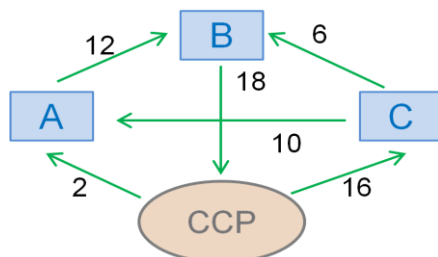
120

The illustration can be summarized as in the table above.

The sum absolute value of 120 has a simple interpretation. It corresponds to the amount of variation margin and collateral that would have to be transferred if the 10 year USD swap rate moved by 1 basis point. (60 paid, 60 received). We refer to this value as the “system risk” of the current situation. Of course, in real life these transfers would have to be calculated and netted on the whole portfolio.

Assume then that a market risk neutral “portfolio risk transferring transaction” can be effectuated which will have the following risk effects on the portfolios:

Illustration & table 2: Portfolio risk transfer transaction 1 “Clear the risk”

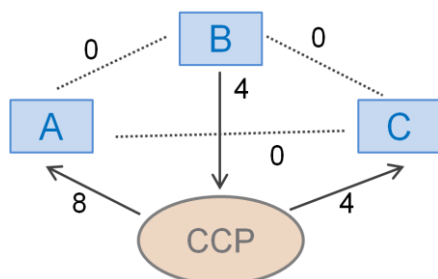


pv01	A	B	C	CCP	Net
A	0	-12	10	2	0
B	12	0	6	-18	0
C	-10	-6	0	16	0
CCP	-2	18	-16	0	0

As can be seen from the table above the net market risk change for each party is zero.

This transaction will result in the following risks between the participants:

Illustration & table 3: Portfolio risk after transaction



pv01	A	B	C	CCP	Net	SumAbs
A	0	0	0	8	8	8
B	0	0	0	-4	-4	4
C	0	0	0	4	4	4
CCP	-8	4	-4	0	-8	16

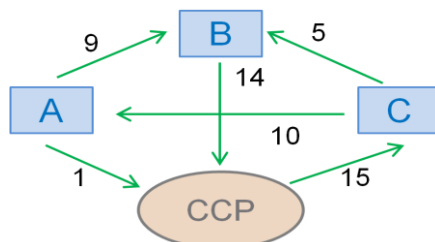
32

As can be seen, all bilateral risk has been eliminated and the net risk is now against the CCP. Effectively, **the risk of the non-clearing eligible transactions has now been cleared.**

The system risk is also significantly reduced, from 120 to 32. Such major decreases cannot normally be expected with only 4 counterparts, but a significant reduction could be possible, especially if all clearing members participate. Also the risk in the CCP has been reduced from 32 to 16. This is not always the case, if the objective and focus has been to reduce bilateral risk as much as possible. The results of the pilot runs we have done show that in real life, not all bilateral risk can be eliminated and the risk in the CCP for some parties may also go up.

The “system risk” of 32 can actually be brought down even further, as illustrated in the following portfolio risk transfer solution applied on the initial state:

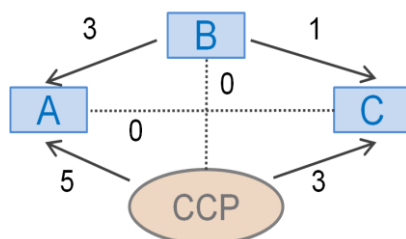
Illustration & table 4: Portfolio risk transfer transaction 2: “Minimize system risk”



	A	B	C	CCP	Net
A	0	-9	10	-1	0
B	9	0	5	-14	0
C	-10	-5	0	15	0
CCP	1	14	-15	0	0

This would result in the following end state where the “system risk” is now 24:

Illustration and table 5: Risk after transaction 2:



	A	B	C	CCP	Net	SumAbs
A	0	3	0	5	8	8
B	-3	0	-1	0	-4	4
C	0	1	0	3	4	4
CCP	-5	0	-3	0	-8	8

24

The last example illustrates that if the objective is to minimize the risk in the system as a whole, the optimal solution may be found by spreading the risk across more institutions. Clearly, it may be argued that CCPs are better equipped to manage portfolio risk, and that the former solution may therefore be preferable. On the other hand, concentrating all risk in CCPs may aggravate the “too-big-to-fail” problem, and it could indeed be a challenge for a CCP to hedge significant portfolio risk in the event that one or more of its members default.

The choice of solution (spread the risk vs risk in the CCP) can be achieved by a simple alteration of the optimization criteria, where the relative weights of bilateral versus clearing risk reduction are adjusted. We welcome guidance/instructions from the regulators on which optimization criteria should be used. In either case, it will still be necessary to maintain a framework where both centrally cleared and bilateral portfolio risk reducing transactions are allowed, so as to enable a reduction in both types of exposures.

Due to continued trading activity, as well as nonlinearities in trading portfolios, such rebalancing must be done with some periodicity. At this stage we anticipate that quarterly rebalancing would be appropriate.

Pilot test

In March 2012 a triBalance pilot test run was done with 9 major dealers participating. The pilot focused on interest rate risk in the USD and EUR swap curves, and targeted reduction in bilateral risk between the dealers as well as dealers risk versus LCH (SwapClear).

The dealers were asked to provide the USD and EUR risk profiles for each of their netting sets involved in the test, i.e. the aggregate, netted risk against each relationship - bilateral and the LCH. This risk profile represents a firm's entire exposure and is aggregated across all products that have sensitivity to USD and EUR swap curves. This includes plain vanilla swaps but also non clearing eligible trades such as swaptions, caps, floors, bespoke and other structured products.

The risk reduction achieved from the triBalance run was then estimated using an equivalent methodology to the risk methodology used by LCH SwapClear. This methodology calculates the largest loss of a portfolio when exposed to a 5 year history of real 5-day shifts in interest rates.

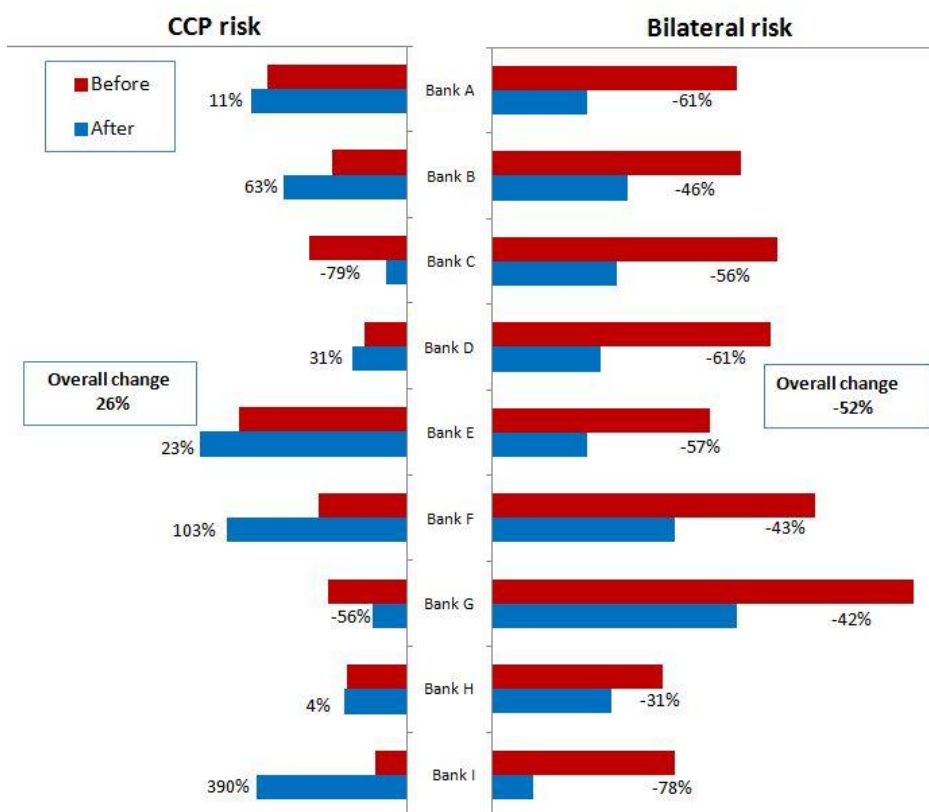
This is only a proxy for the real risk reduction, since in the real world the risk estimate is done on the whole netting set. However, the USD and EUR swap curve risks are dominant in most portfolios and therefore give an indication of what can be achieved. The triBalance process can of course be extended to other currencies and asset classes.

A number of different simulations were done, using different optimization criteria.

Case 1: "Clear the risk"

In this case, the optimization criteria were to reduce bilateral risk to the extent possible, while letting CCP risk be unconstrained.

Illustration 6: Case 1 – Emphasis on clearing the risk

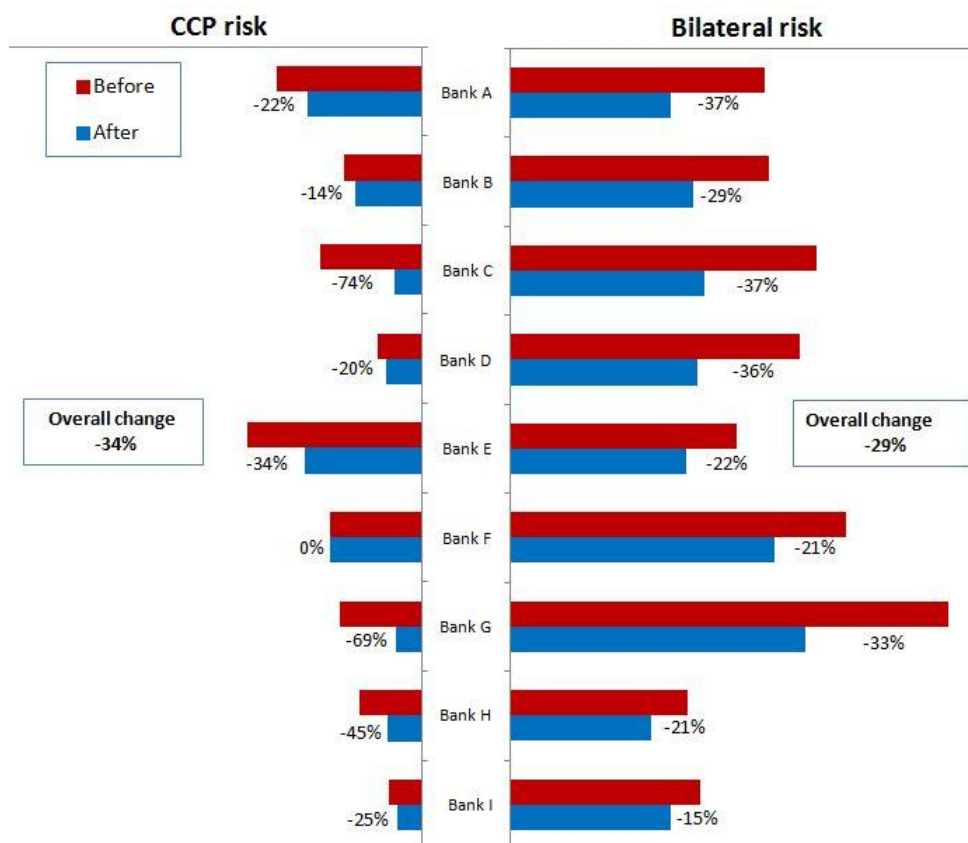


As can be seen from the above, all banks achieved significant reductions in their bilateral risk, but most of them increased the risk versus LCH. The overall system risk reduction was 32%.

Case 2: “Minimize system risk”

In this case, the optimization criteria were set to give equal weight to bilateral and CCP risk reduction. An additional constraint was the block on risk increases in *any* relation.

Illustration 7: Case 2 – Emphasis on minimizing system risk



The overall system risk reduction in this case was 30%.

As seen from these simulation runs, the risk reductions are substantial. The actual risk reductions are in the order of 5-10 billion USD in each simulation. (i.e. reduction in worst 5-day loss from a five year history of real interest rate changes)

The reduction ratios will increase further with more participants, since the chances of finding off-setting risks will increase.

Effectuating a “portfolio risk transfer transaction”

An important constraint is that the “portfolio risk transfer transaction” must be a *multi-party, market risk neutral* transaction. Market risk neutrality is a necessity because none of the parties wish, (or should be able) to change their overall market risk position. Furthermore, the market risk neutrality means that the participants are essentially indifferent to the price levels at which the adjustments are made, which also means that the exercise becomes less time critical (the whole process can take up to 24 hours). The multi-party aspect is necessary in order to find offsetting risks in different netting sets. In order to uphold the market risk neutrality constraints, triBalance proposes a compound transaction, which is an *all-or-nothing* transaction, i.e. all parties must accept the transaction in full or nothing will be done.

The portfolio risk transfers can be achieved either by creating or adjusting existing cash flows where the notional, and sometimes the fixed rate, are then adjusted. Most CCPs do not possess the ability to modify existing transactions, therefore any changes to the CCP’s risk profile must be done by entering into new swaps that must then be submitted for clearing.

In order to reduce the bilateral portfolio risk, adjustments must be made to the cash flows belonging to the netting set from which the bilateral risk emerges.

One way of doing this would be to introduce a set of forward starting fixed and floating cash flows for a period between 1 and 50 years, with an insignificant notional amount per currency. The notional amounts of these cash flows would then be adjusted in the triBalance run, so that they offset the existing risk in the portfolio. Subsequent rebalancing runs could then adjust the same cash flows to accommodate changes to the portfolio risk profile. Metaphorically speaking, the collection of adjustable cash flows then becomes the ballast tanks that keep the financial system on an even keel.

It should be noted that the adjustments of the cash flows are all components of only one singular compound transaction which is the result of the triBalance run. Participants have no discretion: once the rebalancing proposal is accepted by all parties, all cash flow adjustments become legally binding.

One advantage of such cash flow adjustments is that no further notional is added when the risk is rebalanced. On the contrary, the notional amount of the cash flows should decrease over time, as the risk emerging from legacy transactions is reduced.

One problem with the adjustable cash flow approach is that banks in general struggle with the processing of such adjustments. Another issue is that it will be difficult to audit and monitor such cash flow adjustments, since most reporting and record-keeping routines are designed for normal transaction activity.

In order to resolve these issues, it would be decidedly more straightforward to implement the compound transaction by introducing rebalancing component swaps in each triBalance run, and then potentially in subsequent runs replace those swaps with new component swaps. The component swaps should indeed be reported to repositories and flagged as being part of a compound transaction aimed at reducing portfolio risk. This would provide regulators with the

opportunity to verify that the compound transaction is indeed market risk neutral and also to monitor the activity of such transactions.

Mandatory clearing

We are acutely aware of the upcoming requirement for mandatory clearing in the US as well as in other jurisdictions. We acknowledge that CCP clearing will bring significant benefits in terms of systemic risk reduction. We also acknowledge that there will continue to be bilateral trades which will not be eligible for CCP clearing, and thus there will be remaining bilateral risk which needs to be managed.

What we are proposing is an opportunity for the industry to reduce bilateral and CCP risk and **to clear the residual risk** from the non-clearing eligible transactions **in a CCP**. This will be a *complementary* risk reduction to CCP clearing.

The issue we have is that in order to reduce bilateral risk, and indeed exposures to the CCPs, it is necessary to modify the risk profile of the bilateral portfolio. If any such modification is deemed to be a transaction mandated for clearing, then no bilateral risk change can take place. Since the rebalancing proposal is market risk neutral for each party, submitting the whole portfolio risk transferring transaction to the CCP would mean that there would be no change in the CCP risk either. Thus no risk reduction would be achieved.

We are writing this letter in an honest and constructive attempt to try to find ways of allowing this important risk reducing service to operate within the Dodd-Frank framework.

We would argue that the compound transaction coming out of a triBalance run is, regardless of how the components are structured, a bespoke non-standard transaction and as such, neither the compound transaction itself nor its component parts are subject to mandatory clearing.

We respectfully ask the CFTC to indicate whether you agree with our standpoint, and thereby create the clarity necessary for this important risk reducing service to be established.

Sincerely,

Per Sjöberg

Group Chief Executive Officer
TriOptima