Annex 2: Technical Summary of Commission services work on thresholds calibration

Executive Summary

Commission services have undertaken work with the aim of reviewing the thresholds suggested by the HLEG. That work is focusing in particular on how to define trading activity, estimating the institutional implications of different thresholds, and benchmarking the results against other readily available metrics.

Commission services have assessed a number of options for defining trading activity in order to determine the scope of the institutions subject to a separation requirement. Due to the absence of publicly available data for banks' specific business lines, this analysis has been done on the basis of publicly available accounting (balance sheet) data from commercial providers. The analysed options are:

- Using the HLEG definition (Assets held for trading and available for sale);
- A more narrow definition that excludes available for sale assets as mostly composed of securities held for liquidity purposes ;
- A definition focused on the gross volume of trading activity, which is likely to focus on proprietary traders and market-makers; or
- A definition focused on net volumes, which is likely to only capture those institutions that have a higher share of unbalanced risk trading (proprietary traders).

For each of the last three options, absolute and relative thresholds have been assessed. Depending on the option chosen, about 30-35 banks are selected. Even though the selected banks represent less than 20% of the sample, their assets account between 50% and 75% of the assets in the sample, and by and large between 40% and 60% of EU banking assets. It is important to remark that 20 banks are selected under all definitions and they represent 50% of the sample in terms of total assets.

1. Description of the sample and of the data used

The sample is entirely based on the SNL database[1]. It covers 245 EU banks and spans the years 2006-2011. This set of banks represents around 75% of EU banking sector in terms of total assets. Only banks with total assets higher than 1% of their home-country GDP are included in this calibration exercise.

The classes of assets and liabilities used to estimate the trading activities are reported in Table 1. We expand the definition suggested by the HLEG, which focuses on the asset side of the balance sheet, taking also into account two items from the liability side.

Table 1: Classes of assets and liabilities used for estimate the size of the trading activity available in SNL.

Item	Label	Data definition
Total Assets	TA	All assets held by the banks at the indicated date, as carried on the balance sheet and defined under accounting principles in use.
Trading Securities Assets	TSA	Assets part of a portfolio managed as a whole and for which there is evidence of a recent actual pattern of short-term profit-taking, **excluding derivative assets**.
Derivatives Assets	DA	Derivatives with positive replacement values not identified as hedging or embedded derivatives.

[1] http://www.snl.com/

Available For Sale Securities	AFS	Total securities designated as available for sale
Derivatives Liabilities	DL	Derivatives with negative replacement values not identified as hedging instruments.
Trading Liabilities	TSL	Liabilities taken with the intent on repurchasing in the near term, part of a portfolio managed as a whole, and for which where there is evidence of a recent actual pattern of short-term profit-taking, **excluding derivative liabilities**.

2. Definitions

The HLEG report refers to trading activities as <u>bank's assets held for trading and Available-For-Sale assets</u> (AFS). This definition has received important criticism during the consultation with stakeholders, especially as AFS can be composed to a large extent by high quality liquid assets: government or corporate bonds held by banks for liquidity rather than for trading purposes.This issue has been tackled excluding this class of assets in the definition of trading activities.

The Commission services are also considering other options for structural separation. Within this analysis, an important issue is that of how to distinguish between the proprietary trading and the market making activity of banks. While precise legal and economic definitions of these activities go beyond the scope of this work, for the purpose of setting *de minimis* thresholds, one can - in very general terms - assume that proprietary trading is more exposed to market risk while market making is more related to counterparty risk. On this basis, we put forward two definitions aimed at distinguishing between these activities.

To capture both **market makers and proprietary traders**, we suggest to focus on **gross volumes** of trading activities by summing assets and liabilities. This measure could be, in our opinion, a proxy for banks' exposure to counterparty and market risk.

To capture **proprietary traders only**, we suggest to focus on unbalanced positions between assets and liabilities, (**net volumes)**. This idea is based on the assumption that market makers normally try to keep a balanced net position while still showing important gross positions; while proprietary trading is based on directional bets that the market will move in a certain direction, so that it generates asymmetric positions on the two sides of the balance sheet.

Table 2 shows the four analyzed definitions.

Table 2: Definitions of trading activities based on the labels of balance sheet items introduced in Table 1.

	Definition	Description
1	TSA + DA + AFS	Original HLEG definition
2	TSA + DA	Exclude AFS
3	(TSA + TSL + DA + DL)/2	Exclude AFS + Gross volumes of securities and derivatives (on both sides of the balance sheet)
4	|TSA - TSL| + |DA - DL|	Exclude AFS + Net volumes of securities and derivatives

3. Thresholds

The HLEG report suggests that banks with either a significant volume of trading activities (above 100 bn€) or with a significant share of trading activities on total assets (between 15-25%) should be considered for separation. However, cluster analysis shows that it is preferable to move the threshold on the volume of trading activities to 80 bn€ with no changes in the selected set of banks.

Commission services estimated how these thresholds would move under the various considered definitions and also developed a statistical exercise based on cluster methodology to corroborate the value of the so-obtained thresholds.

Table 3 shows how the HLEG thresholds change for the sample of banks considered when moving to the other definitions.[2] When considering on average "equivalent" thresholds, it can be noticed how the numbers of selected banks is relatively limited, with banks exceeding at least one of the two thresholds varying between 28 and 40, while the HLEG definition would identify 51 banks.

Results for the cluster analysis do not diverge substantially and the stability of the number of selected banks further improves, as it now ranges between 32 and 36. Even though the selected banks represent less than 20% of the sample, their assets account between 50% and 75% of the assets in the sample, and by and large between 40% and 60% of EU banking assets.[3]

It is important to remark that 20 banks are selected under all definitions and they account for 50% of the total assets in the sample.

[2] As an example, we illustrate here how the thresholds change from definition 1 to definition 2. Our starting thresholds are 80 bn € in Trading Assets and 20% in Share of Trading Assets for definition 1. We need to exclude AFS, whose average in our sample is 15 bn €, from these thresholds. We move therefore the Trading Assets threshold down to 65 bn €. On the other hand, the share of AFS over total assets accounts on average for around 8%, hence the threshold for share of trading assets goes from 20% down to 12%.

[3] By including also banks close to the thresholds the set of banks selected raises to roughly 45 for all three definitions. The number of banks selected by all definitions increases to 27.

Table 3: Proposed examination thresholds.

Definition of Trading Activity		HLEG equivalent			Cluster		
		Trading Activity Threshold (€ bn)	Trading Activity/ Total Assets	Number of banks exceeding at least one threshold	Trading Activity Threshold (€ bn)	Trading Activity/ Total Assets	Number of banks exceeding at least one threshold
1	TSA + DA + AFS	80	20%	52	80	20%	52
2	TSA + DA	66	12%	40	70	15%	32
3	(TSA + TSL + DA + DL)/2	62	10%	36	70	10%	36
4	|TSA - TSL| + |DA - DL|	37	8%	28	30	8%	33

4. Conclusions

Based on the analyses, we can conclude the following:

- Independently of the definition of trading activities, the percentage of banks selected in our sample composed of 245 banks is not very high, varying in the range 13%-21% in terms of number and between 50% and 75% in terms of total assets, i.e. by and large between 40% and 60% of EU banking assets. Most G-SIBs are identified by all definitions.
- 20 banks are selected under all definitions and they represent 50% of total assets in the sample.
- Our analysis using the HLEG definition identifies thresholds of 80 b€, or 20% of total assets, in line with what proposed by the HLEG (100 b€, 15%-25%).
- The HLEG definition selects more banks than the others, partly due to the presence of the AFS assets (not considered in the other definitions).
- A definition based on gross volumes is used to have a proxy able to identify market making and proprietary trading. It shows a quite stable pattern along the years; the total number of selected banks is lower than for HLEG.
- A definition based on net volumes is used to identify proprietary trading only. In general the results based on this definition are slightly less stable over time with respect to the others; the total number of selected banks is lower than for HLEG.