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Paris, June 29th, 2017,

Dear members of the Basel Committee on Banking Supervision,

We would like to thank you for soliciting some feedback about the latest consultation paper “Global systemically important banks – revised assessment framework” (hereafter, BCBS, 2017).

We are finance professors working in several French Universities and our academic research mainly focuses on the quantification of systemic risk in the banking system. In a recent academic paper entitled “Pitfalls in Systemic-Risk Scoring” (hereafter, Benoit *et al.*, 2017), which is available at: <https://ssrn.com/abstract=2332030>, we make several suggestions to improve the current systemic-risk scoring methodology.

Below we provide some specific comments on the proposed changes to the G-SIB assessment methodology.

1. We are pleased to see that the BCBS is considering removing the cap on the substitutability category. This is one of our main suggestions in Benoit *et al.* (2017).¹ In this paper, we show that using a cap severely distorts the allocation of regulatory capital among banks and creates no incentives for the largest custodian banks to internalize some of the externalities created by their activities. However, simply removing the cap is not enough. Indeed, when variables are aggregated in absence of any form of standardization, they are effectively weighted by their standard deviation, which is particularly high for the substitutability category. As a consequence, the substitutability category would have too high an impact on the final score. A standard way to correct for this statistical problem is to standardize each category by its cross-sectional volatility. Using newly-disclosed regulatory data for 119 US and international banks, we show in Benoit *et al.* (2017) that standardizing each category by its own volatility is an easy and efficient way to fix this problem.

¹ We already made a similar point back in 2013 when providing feedback on an earlier BCBS consultation paper on global systemically important banks. See our original letter at: <http://www.bis.org/publ/bcbs258/udhp.pdf>.

Removing the cap without standardizing the data is likely to have major real effects on the banking industry. For instance, some of the largest custodian banks may decide to shut down some of their repo activities in order not to face higher regulatory capital requirements. This would lead to *more* concentration in the repo market and would *increase* systemic risk. As such, this would go against the third principle of the revised G-SIB assessment methodology: “The G-SIB methodology provides incentives for banks to reduce concentration in categories associated with high externalities in the event of default” (BCBS, 2017).

2. A second shortcoming of the revised G-SIB assessment framework (BCBS, 2017), which was already plaguing the original G-SIB assessment framework (BCBS, 2014), is related to the reference currency used to aggregate bank data across currency zones. We show in Benoit *et al.* (2017) that any depreciation of a currency with respect to the Euro mechanically *lowers* the score of the banks headquartered in this particular currency zone and *increases* the score of Eurozone banks. This is definitely not intuitive as currency depreciations are typically associated with negative changes in future economic condition (Engel and West, 2005) and increase the likelihood of banking crises. Similarly, any depreciation of the Euro mechanically favors Eurozone banks and penalizes non-Eurozone banks.

In Benoit *et al.* (2017), we decompose the changes in systemic-risk scores between two consecutive years into three relative contributions: (i) the effect of the bank’s own risk indicators, (ii) the effects of other banks’ risk indicators, and (iii) the effect of the exchange rates. The main takeaway from our empirical analysis is that the effect of exchange rates on systemic-risk scores is first order. For instance, between 2014 and 2015, the significant reduction in the level of systemic-risk indicators (expressed in USD) of JP Morgan has been completely compensated by the contemporaneous appreciation of the USD with respect to the Euro. An opposite effect should be expected in 2017 since British banks will see their systemic-risk scores mechanically decrease due to the depreciation of the British Pound following the vote on Brexit. Such an effect may encourage British banks to increase their own systemic-risk indicators without facing higher regulatory capital requirements. To restore incentives for banks to reduce their systemic-risk contribution, we propose to remove this foreign-exchange effect by using reference exchange rates which are kept constant from one year to the next. Foreign exchange rates, just like cut-off thresholds for buckets, will need to be periodically updated.

Sincerely yours,

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References:

Basel Committee on Banking Supervision (2014): "The G-SIB Assessment Methodology – Score Calculation," Report.

Basel Committee on Banking Supervision (2017): "Global Systemically Important Banks – Revised Assessment Framework," Consultative document.

Benoit, S., C. Hurlin, and C. Pérignon (2017): "Pitfalls in Systemic-Risk Scoring," HEC working paper.

Engel, C. and K. D. West (2005): "Exchange Rates and Fundamentals," *Journal of Political Economy*, 113 (3), 485-517.