This is a significant paper which I recommend for publication. The paper includes both a clear review of a large and varied existing literature, and proposes some novel solutions of its own to mitigate systemic risk.

The efficacy of the paper's proposed solutions is difficult to assess because they are hypothetical and would require bold public leadership. Even so, I believe the paper accurately diagnoses *the* source of systemic risk: excess creation of short-term liabilities that conventionally act as currencies leading to price booms, followed by busts when confidence in the repayment of those liabilities, or drying up of their cash flow, occurs. This is especially likely to occur when short-term liabilities finance longer-term assets ('maturity mismatch'). Furthermore—and what is of fundamental importance—the paper, particularly section 3, suggests this is a structural issue which regulators still have not adequately addressed. As the paper reminds us, our dominant form of money (deposits) is mostly determined by the credit decisions of commercial banks. So long as central banks choose to supply reserves as required by commercial banks, the authorities cannot control the money supply. Since banks today are not passive intermediaries but profit maximizing agents with sophisticated sales and liability management strategies, they tend to issue too much debt relative to output, thus generating systemic risk. The paper makes this point convincingly.

However, I am not fully persuaded by the specific remedy the paper proposes. In part, this is because the paper presents several proposals as a unified package, reflected in the paper's title: register, issue, cap, and trade. Each of these proposals warrants a separate, full-length paper and feedback from subject matter experts. Moreover, my view is that the three key elements of this

package—(1) a registry of liabilities; (2) the creation of tradable licenses for short-term liabilities; and (3) implementing expansionary monetary policy via the registry to respond to the threat of debt-deflation—need to be unpacked, because they have varying merits.

The first proposal is for the creation of a central registry of financial assets and liabilities updated in real-time. I have the greatest sympathy for this proposal. It is clear that in the build-up to the current crisis, regulators, credit rating agencies, shareholders, and even financial firms themselves did not fully understand the risks they were running. The situation has not vastly improved. Like monetary policy, current regulatory returns are still subject to long and variable lags. This means the new rules imposed on financial markets are effectively neutralized by the fact regulators do not have the data to actually monitor them.

The second proposal is less convincing. It argues that licenses are needed to limit ('cap') the volume of lending and that these licenses could be saleable ('trade) on a quarterly basis through a blind auction organised by the authorities. As ever, the devil is in the detail. Why a quarterly auction instead of daily or weekly? On what basis would the authorities determine the upper limit? Why should all long term liabilities with a residual maturity under a year fall within the licensing system if not all of these liabilities function as monies or quasi-monies? These are difficult questions that need answering. In particular, although the paper, to its credit, tries to address the challenges of foreign financial flows and black markets, I do not believe it does so entirely successfully.

Finally, I am most sceptical about the use of the liability register as a mechanism for stimulating the economy in the face of debt-deflation, primarily because I am sceptical of the wisdom behind such interventions more generally. As the paper notes, such interventions have distributional consequences that favour the profligate at the expense of the parsimonious, and advantage those at the core of the financial system relative to the peripheral (the unbanked, mostly poor).

Even if we bracket the issue as to whether a 'helicopter drop' of cash to inflate away debt is desirable, it is important to note that the UK government could issue its own currency without needing the liability register the paper advocates. For instance, the Royal Mint could mint such monies into circulation or the Treasury could issue its own currency as it did during the financial crisis of 1914. As the paper insightfully notes, in order for such stimulus to be effective, monetary expansion would need to be complemented by credible inflationary expectations. This could occur if the authorities raised their inflation target or replace it with a target for nominal GDP, as recently suggested by incoming Bank of England Governor Mark Carney.

In sum, whatever its shortcomings, this is a refreshingly bold paper. This alone makes it laudable because it contrasts sharply with the tepid reforms so far enacted. As the paper observes, although these reforms are often termed 'unorthodox,' they are "actually very orthodox." As the paper concludes, "This cannot work."