This paper provides a rigorous model of public sector debt (and deficit) accumulation in the presence of integrated financial markets across countries and increasingly costly tax collection. This is of value in itself because there is very little in the existing literature on these themes, and it would be welcome to have some formal analysis on this topic – to serve as a starting point for more detailed analysis of the key mechanisms involved, if for no other reason.

Second, in support of that point, there are number of useful insights into the debt accumulation process in an international context that we didn’t have before: the role of costly (financially, or politically, or in compliance costs) tax changes, the redistributive real interest rate mechanism, the distinction between the single country process, the few countries case, and the large number of (social optimum) case.

Nevertheless, the model in this paper is pretty specific and contains a number of restrictions which need to be relaxed in order to explore the extent to which the results then change. This would enable us to identify the key mechanisms in debt accumulation. Some of this is done in the paper: extending the analysis to labour market effects (distortionary labour taxes), to capital accumulation and investment goods. More important would be to go on to examine the extent to which having no monetary policy (no internal coordination problem), imposing sustainable fiscal rules (and hence no risk premia), a simplified model, or an incomplete time inconsistency explanation, distorts the results. I don’t say this to run the paper down and imply that it should not be published; but that it should be seen as a platform to examine these possibly more crucial cases, and be presented as such.

More detailed comments:
1) The assumption that all debt must remain sustainable is an obvious restriction that rules out any risk premia because agents know that fiscal policies always remain sustainable. Risk premia have been a major component in the Euro debt problem, and the fiscal rules should be relaxed to allow at least a probability of default to reflect this reality. In other cases, an active monetary policy may be the important factor.
2) The countries here are symmetric. Since we already know that the importance of coordination is strongly affected by country asymmetries, it is important to know if that is also true in this multi-country debt setting.
3) Inefficiencies arise only in this multi-country debt setting. But might not the same be true if there are multiple actors/institutions within (say) a single country? This is not considered. But OLG models are, where we see intergenerational redistributions (casual observation suggests this may be larger than the inter-country redistributions featured in this paper?). So this paper is pre-sumably the spatial version of the time series results.
4) The fiscal sustainability restriction shows that the high taxes deficits today and low taxes to-morrow result, which many countries seem to strive for, is not just an artefact of
the election cycle. Nor is it natural time inconsistency (promises of sustainable deficits that get abandoned). In fact, the model here is of the form $x_t = f(x_{t+1}, \text{other stuff}_t)$ which means it satisfies the Markov property and should be solved by dynamic programming in reverse (optimisations going forward in time), but policy “implementation” (in a manner of speaking) going backward [as laid out in Bellman’s second book]. That means the implementation phase starts by imposing the terminal condition, and the broken promise that gives rise to possible time inconsistency is that the initial condition, $b_{t-1}$ when determining the second period outcomes, is ignored.

5) Putting the last point another way, $b_{t+1}$ in (9) is a function of $b_t$ and $b_{t-1}$. But this last term is not, as far as I can see, taken into account. In a multi-period problem, $n \geq 3$, the decision rules at $t=2, 3...$ become suboptimal, as we see in section 5, opening the door to time inconsistency. It would help to have a more exact explanation of how time inconsistency can arise. Note that, if you impose (10) this is time inconsistency about the route by which you get to the final outcome; not time inconsistency about the final outcomes which is the textbook case we normally discuss. This is why a better explanation is important for this paper.

6) The intuition that $N=1$ (or $N \to \infty$) represents the social, global or cooperative equilibrium, but $N>1$ the intervening non-cooperative cases is good. But these results have been available for sometime; see de Bruyne (EER 1979) or the Hughes Hallett and Rees book (1983). Some acknowledgement of that should be included.

7) The paper’s title suggests there would be an optimal level of public debt, and the analysis gets very close to that issue. The paper itself never specifies what it thinks “too little” is or whether the model actually predicts that (the inter-temporal redistribution results do not, in themselves, suggest anything of that kind). This is an important loose end that needs to be cleared up. At least some reference to the existing literature on optimal debt levels driven by the marginal product of public capital (see Aschauer 2000, Aiyagari and McGrattan 1998, Checherita et al 2013).