Floquet Theory and Economic Dynamics (Extended version)
CORRECTIONS AND SUPPLEMENTS

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<u>Corrections:</u>

1. *page 5, line 23* ↑: $\underline{C}_t, \underline{I}_t, G_t$ arbitrary. ...
2. *page 5, line 5* ↑: ...and, G_t are unrealistic.
3. *page 7, line 1* ↓: (6) - (11) are ...
4. *page 9, line 23* ↓: multiplier of $(PSH)^{(0)}$. We ...
5. *Page 10, line 9* ↑: ...are bounded, $g := \frac{C+I}{1-\gamma} + \lambda_1^t + \overline{\lambda_1}^t$ is ...
6. *Page 11, line 5* ↓: ...i.e. not with a system of ...
7. *Page 12, line 9* ↑: ...the notation ☺$^{(U)}$.
8. *Page 17, line 7* ↓: $\mathcal{B}_t^{(M)}(G_M(t+1)) = -\sum_{s=0}^{M-1} \mathcal{B}_t^{(s)}(G_{s+1}(t)) + U_t$.
9. *Page 17, line 6-7* ↑: ...A.4.2.
10. *Page 18, line 15* ↓: 'b ⇒ a': Let ...
11. *Page 18, line 17* ↓: Because $\mathcal{H}$ is finite dimensional, all four statements are equivalent with bijectivity of $\mathcal{H} \upharpoonright \mathcal{W} : \mathcal{W} \to \mathcal{W}$.
12. *Page 19, delete lines 7-11* ↓.
13. *Page 19, line 13* ↓: that each $\mathcal{B}_t^{(s)} \in \mathrm{End}(\mathbb{R}^N)$ and each $U_t \in \mathbb{R}^N$. ...
14. *Page 19, line 17* ↓: B. In particular SOL$'$ and SOL$^{(0)'}$ are defined.[81]
15. *Page 20, replace Proposition 13 and its proof by:*

    Proposition 13 Fix $G : \mathbb{N} \to \mathbb{C}^m$. For no $c \in \mathbb{T}$ one has $\mathcal{C}G = cG \Leftrightarrow G$ and $\mathcal{C}G$ are linear independent $\Leftrightarrow \Re g$ and $\Im g$ are linearly independent. ⋄

    Proof.— The second '⇔' and first '⇐' are clear. First '⇒': by contradiction suppose for no $c \in \mathbb{T}$ one has $\mathcal{C}G = cG$ and $G, \mathcal{C}G$ would be linearly dependent. It follows that $G \neq 0$. There is $c \in \mathbb{C}$ so that $\mathcal{C}G = cG$, and we find $G = \mathcal{C}(\mathcal{C}G) = \overline{c}(\mathcal{C}G) = |c|^2 G$. Thus, $|c| = 1$, a contradiction. □
16. *Page 20, line 13* ↑: For ☺ with real ...
17. *Page 21, line 13* ↓: ...equation $\sum_{s=0}^{M} (\mathcal{B}_t^{(s)} L_{t+s}^{-1}) J(t+s) =$
18. *Page 21, line 17* ↓: ...equation $\sum_{s=0}^{M} (\mathcal{B}_t^{(s)} L_{t+s}^{-1}) J(t+s) = 0$ ...

19. *Page 22, line 15* ↓*:* $\ldots = \mathcal{F}_t\ (t \geq 0)$;
20. *Page 22, line 19* ↓*:* $\Phi_{t+1,t}(Y) = \mathcal{G}_{t;Y}(t+1) = \ldots$
21. *Delete Page 23, line 14* ↓*.*
22. *Page 25, line 1* ↑*:* $\ldots M$ coefficients of ...
23. *Page 26, line 9* ↓*:* $\ldots(\mathcal{Q}(\mathcal{P}g))(t) = g(t)$. $\mathcal{P}\mathcal{Q} = id \ldots$
24. *Page 26, line 10* ↑*:*$\ldots = \mathcal{M}_t((\mathcal{P}g)(t))+$
25. *Page 26, line 9* ↑*:* $\ldots = (\mathcal{M}_t((\mathcal{P}g)(t)))_M + (W_t)_M \cdots$
26. *Page 29, line 21* ↑*:* lution of < 𝅗𝅥 > is ...
27. *Page 31, line 9* ↓*:* ... for $z \in \mathbb{C}^\star$, by ...
28. *Page 31, line 12* ↓*:* ... and $z \in \mathbb{C}^\star$, a ...
29. *Page 31, line 14* ↓*:* $\cup_{z \in \mathbb{C}^\star} \mathrm{FLOQ}_{q,z}$ a '$q-$Floquetian mapping'. We call any $\mathrm{FLOQ}_{q,z}^{(n)}$, where $q \geq 1, z \in \mathbb{C}^\star$
30. *Page 31, line 14* ↓*:* ... where $q \geq 1$, $z \in \mathbb{C}^\star$
31. *Page 35, line 13* ↓*:* $\ldots(\Phi_{jq,0})_{j \in \mathbb{N}}$ is a ...
32. *Page 36, line 15* ↓*:* $(\mathcal{H}_z G)(t) = \sum_{s=0}^{M} (z^{s/q} \mathcal{B}_t^{(s)}) G(t+s)$.
33. *Page 46, line 9* ↓*: 3.* $(\Phi_{t,0})_{t \in \mathbb{N}}$ is a ...
34. *Page 46, line 4* ↑*:* 3. $\Phi_{0,0} = id$ and $\Phi_{t+t',0} = \Phi_{t,0}\Phi_{t',0}$.
35. *Page 48, line 8* ↓*:* By 'the monodromy matrix of $♩^{(0)}$' we ...
36. *Page 48, line 9* ↓*:* operator of
37. *Page 49, line 24* ↑*:* With lemma 2. 1. $\mathcal{H}\delta^{(l)} = \ldots$
38. *Page 49, line 21* ↑*:* $\mathcal{H}\delta^{(l)} = \sum_{s=0}^{M} v_t^{(s)} \mathcal{T}_s \delta^{(l)} = \sum_{s=0}^{M} v_t^{(s)} \delta^{(l-s)} = \sum_{j=l-M}^{l} v_t^{(l-j)} \delta^{(j)} =$
39. *Page 49, line 20* ↑*:* $\sum_{j=l-M}^{l} v_j^{(l-j)} \delta^{(j)}$. □
40. *Page 53, line 11* ↑*:* $|\mathrm{Vand}(z_1, \ldots, z_n)| = \prod_{1 \leq j < i \leq n} (z_i - z_j)$.
41. *Page 54, line 13* ↑*:* ... and $p^0 \neq 0$.
42. *Page 54, line 3* ↑*:* ... as $\mathrm{Comp}(a_1) = -a_1$.

Comments:

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Further reading:

Please use "Floquet Theory and Economic Dynamics. II" instead of this article (i.e. "Floquet Theory and Economic Dynamics (extended version)"), The former article is the latter in which the above corrections have been implemented and a few results/remarks have been added.

If you think that some other things should be added here, then please let me know.