

## On two classical turnpike results for the Robinson-Solow-Srinivasan (RSS) model

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**Abstract.** Turnpike theory as originally conceived by Samuelson pertains to optimal programs over a large but finite time horizon with given initial and terminal stocks. In this paper, we present two turnpike results in the context of a model proposed by Robinson, Solow and Srinivasan, and the subject of extensive recent analysis as the RSS model. Our results are classical except that they are phrased in terms of (i) approximately optimal programs, and (ii) golden-rule stocks rather than their parent facet, and they underscore the distinction between the original theory and the asymptotic stability of optimal infinite horizon programs. Our results, and the arguments used to prove them, go beyond the RSS model to contribute to the general theory.

**Key words:** Turnpike, asymptotic stability, choice of technique, good program, optimal program, approximately optimal program, large but finite time horizon