

**Özban, Ahmet Yaşar**

**On the positive solutions of the system of rational difference equations**  $x_{n+1} = 1/y_{n-k}, y_{n+1} = y_n/x_{n-m}y_{n-m-k}$ . (English) [\[Zbl 1115.39012\]](#)  
*J. Math. Anal. Appl.* 323, No. 1, 26-32 (2006).

The periodicity of solutions of the system of rational difference equations of the form  $x_{n+1} = 1/y_{n-k}, y_{n+1} = y_n/x_{n-m}y_{n-m-k}, n = 0, 1, \dots$ , is investigated.

Reviewer: [Ioannis P. Stavroulakis \(Ioannina\)](#)

**MSC:**

**39A11** Stability of difference equations (MSC2000)

**39A20** Multiplicative and other generalized difference equations, e.g., of Ly-  
ness type

Cited in **22** Documents

**Keywords:**

system of rational difference equations; positive solutions; periodicity

**Full Text:** [DOI](#)

**References:**

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- [2] Yang, X., On the system of rational difference equations  $x_n = A + y_{n-1}/x_{n-p}y_{n-q}, y_n = A + x_{n-1}/x_{n-r}y_{n-s}$ , *J. math. anal. appl.*, 307, 305-311, (2005) · [Zbl 1072.39011](#)
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- [5] Camouzis, E.; Papaschinopoulos, G.C., Global asymptotic behavior of positive solutions on the system of rational difference equations  $x_{n+1} = 1 + x_n/y_{n-m}, y_{n+1} = 1 + y_n/x_{n-m}$ , *Appl. math. lett.*, 17, 733-737, (2004) · [Zbl 1064.39004](#)

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