

0.08	14575.39	14574.87	14690.17	14575.39	14714.74715
0.09	14523.47	14522.95	14651.89	14523.47	14679.68206
0.1	14471.79	14471.27	14613.7	14471.78	14644.72442

8. Comparative Study of Profits of the System Models

The profit of the present model has been compared with that of the model Munday and Malik (2015). It is observed that the present model is less profitable as compared to that model. Thus, in a computer system with software redundancy in cold standby, the idea of priority to hardware repair over software up-gradation is not helpful in increasing the profit of the system if system has more chances of hardware failure than that of software failure ($a > b$). However, this idea can be helpful in improving the profit of a computer system which has less chances of hardware failure as compared to software failure. And, in that situation the profit difference of the system models goes on increasing with the increase of hardware failure rate. The profit difference (P-P1) of the models is shown numerically in table 4.

9. Numerical Presentation of Profit Difference (P – P1)

Table 4: (P-P1) Vs Hardware Failure Rate (λ_1)

λ_1	$\lambda_2=0.001, \alpha=2, \theta=5,$ $a=0.6, b=0.4$	$\lambda_2=0.002$	$\alpha=3$	$\theta=7$	$a=0.4, b=0.6$
0.01	-15.6815831	-15.4128745	-11.39364555	-15.69047607	20.61784182
0.02	-31.53207673	-31.26288897	-23.04367167	-31.54195767	41.27628135
0.03	-47.28423293	-47.01456637	-34.68146501	-47.2953841	61.70976563
0.04	-62.93887394	-62.66872919	-46.30650628	-62.95171252	81.92077038
0.05	-78.49681575	-78.22619364	-57.91829329	-78.51188892	101.9117387
0.06	-93.95886812	-93.68776969	-69.51634047	-93.97684822	121.6850814
0.07	-109.3258346	-109.0542611	-81.10017841	-109.3475145	141.2431778
0.08	-124.5985124	-124.3264653	-92.66935339	-124.624801	160.5883759
0.09	-139.7776927	-139.5051736	-104.2234269	-139.8096104	179.7229931
0.1	-154.8641603	-154.5911711	-115.7619754	-154.9028351	198.6493166

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