## Bauch\_Disturbances

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2023-02-27

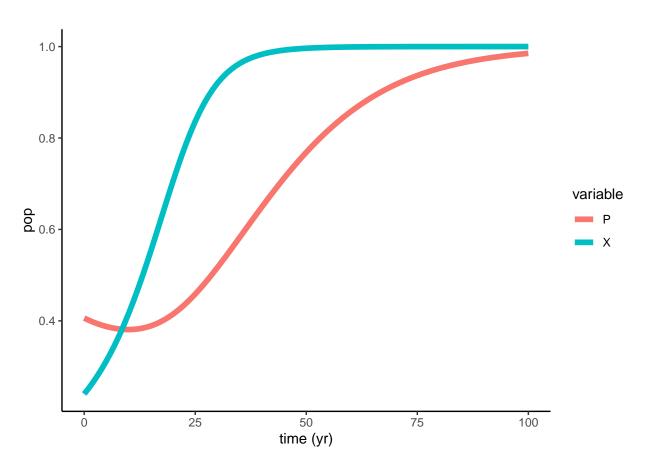


Figure 1: Original Bauch Model

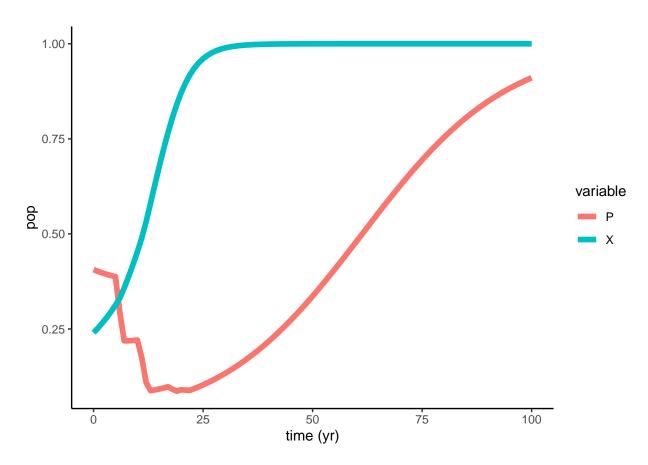


Figure 2: Bauch Model with shocks

0         0.4060000         0.2400000         0.4060000         0.2400000         0.0000000           1         0.4014802         0.2523789         1         0.4014802         0.2523789         0.0000000         0.0000000           2         0.3973659         0.2657418         2         0.3973659         0.26567418         0.0000000         0.0000000           4         0.3904039         0.2595663         4         0.3904039         0.259563         0.0000000         0.0000000           5         0.3875862         0.3124251         5         0.3579004         0.000000         0.0000000           6         0.385340         0.3304090         6         0.2930689         0.3314035         0.2392415         0.000000           7         0.3853240         0.3347069         7         0.2187809         0.357904         0.4293182         0.0234297           9         0.3811821         0.392128         0.4158937         10         0.2207389         0.452738         0.4225000         0.084912           10         0.3809128         0.4168987         10         0.2207389         0.452728         0.425000         0.04461216           10         0.3387219         0.4404792         1         0.174500 </th <th>time1</th> <th>P1</th> <th>X1</th> <th>time</th> <th>P</th> <th>X</th> <th>Pdiff</th> <th>Xdiff</th>	time1	P1	X1	time	P	X	Pdiff	Xdiff
1         0.4014802         0.2523789         0.0000000         0.0000000           2         0.3973659         0.2657418         2         0.3973659         0.2657418         0.0000000         0.0000000           3         0.3936691         0.2801578         3         0.3936691         0.2801578         0.0000000         0.0000000           5         0.3875862         0.3124251         5         0.3875862         0.3124251         0.2930689         0.3314035         -0.2392415         0.000000           6         0.3852340         0.3303090         6         0.2930689         0.3703673         8         0.2187001         0.4289073         0.000000           8         0.382089         0.3703673         8         0.2189701         0.418918         0.4289757         0.067955           10         0.3801128         0.4158937         10         0.2207389         0.4597082         0.42205002         0.0885781           11         0.381821         0.34047025         11         0.1748060         0.4890026         -0.5414662         0.1094468           12         0.3821262         0.4668859         12         0.1748600         0.4890026         0.7141190         0.134411           1         0.3	-							
2         0.3973659         0.2857418         2         0.39736691         0.2801578         3         0.3936691         0.2801578         0.0000000         0.0000000           3         0.3396691         0.2801578         3         0.3930699         0.2956963         0.000000         0.000000           5         0.3875862         0.3124251         5         0.3875862         0.3124251         0.000000         0.000000           6         0.3830690         0.379009         0.5579004         0.4293182         0.0031907           8         0.3820089         0.3703673         8         0.2187809         0.3579004         0.4293782         0.0367575           10         0.3809128         0.4158937         10         0.2207389         0.4527328         0.42097675         0.0679555           11         0.3809128         0.4407625         11         0.1748060         0.4890026         0.5414662         0.094468           12         0.3821562         0.4668859         12         0.1092550         0.5320266         -0.7141090         0.1392771           13         0.383749         0.4944797         13         0.087662         0.5820243         -0.7762441         0.20244424           15								
3         0.3936691         0.2801578         3         0.3936691         0.2801578         0.0000000         0.0000000           4         0.3875862         0.3124251         5         0.3875862         0.3124251         0.000000         0.0000000           6         0.3852340         0.3304090         6         0.2930689         0.3314035         -0.2392445         0.0030100           7         0.3833675         0.3497069         7         0.2187809         0.3579004         -0.42993782         0.0421216           9         0.3811821         0.3924245         9         0.2195701         0.419018         -0.4290703         0.0461216           10         0.3801282         0.44167625         11         0.174906         0.5414662         0.109468           12         0.3821562         0.4669859         12         0.1092550         0.5320266         -0.7141090         0.1392777           13         0.3835917         0.5231146         14         0.089756         0.6292253         -0.6767418         0.2028424           15         0.3859617         0.5231146         14         0.089048         0.6292253         -0.7652647         0.225711           16         0.396954         0.6138222         <								
4         0.3904039         0.2956963         4         0.3904039         0.2956963         0.0000000         0.0000000           5         0.3875862         0.3124251         5         0.3875862         0.3124251         0.0000000         0.0000000           7         0.3833675         0.3497069         7         0.2187809         0.3579004         -0.4293182         0.0234297           8         0.3820089         0.3703673         8         0.2188701         0.1429375         0.0429375         0.0679555           10         0.3801282         0.4158937         10         0.2207389         0.4527328         -0.4205002         0.0885781           11         0.3812282         0.4407625         11         0.1748060         0.4890026         -0.5414662         0.109468           12         0.3821562         0.4669859         12         0.1092550         0.5320266         -0.7141090         0.1392771           13         0.3837249         0.4944797         13         0.0869756         0.62922253         -0.7674418         0.2024412           15         0.3825409         0.5530404         16         0.0947982         0.753333         -0.75362647         0.2254712           16         0.3925409								
5         0.3875862         0.3124251         5         0.3875862         0.3124251         0.0000000         0.0000000           6         0.3852340         0.3304090         6         0.2930689         0.3314035         -0.2392445         0.003100           7         0.3832075         0.3497069         7         0.2187809         0.3579004         -0.4269003         0.0461216           9         0.3811821         0.3924245         9         0.2195701         0.419018         -0.4269003         0.0461216           10         0.3809128         0.4158937         10         0.2207389         0.4527328         -0.4205002         0.0885781           11         0.381252         0.4407625         11         0.1748000         0.4890026         -0.5414662         0.19468           12         0.38321562         0.4669859         12         0.1092550         0.5802026         -0.7141090         0.1392777           13         0.3837249         0.4444797         13         0.3837249         0.4444797         13         0.3837249         0.4444797         13         0.763320         0.7633647         0.225412           16         0.3925409         0.583044         16         0.0947882         0.7233333								
6         0.3852340         0.3304000         6         0.2930689         0.3314035         -0.2392445         0.003100           7         0.3833675         0.3497069         7         0.2187809         0.3579004         -0.4293182         0.0234297           8         0.3820089         0.3703673         8         0.2188292         0.3874492         -0.4269003         0.0461216           9         0.3811821         0.3924245         9         0.2195701         0.4190918         -0.4239757         0.0679555           10         0.3809128         0.4158937         10         0.220789         0.4890026         -0.5414662         0.0984468           12         0.3821562         0.4669859         12         0.1092550         0.532066         -0.7141090         0.1392777           13         0.385917         0.5221116         14         0.0897586         0.6292253         -0.7674418         0.2024414           15         0.3888927         0.5527115         15         0.09097880         0.733333         -0.7585012         0.22407088           17         0.3965499         0.5830404         16         0.0947982         0.7347330         -0.758121         0.2484294           18         0.4079515								
7         0.3832075         0.3497099         7         0.2187890         0.3570004         -0.4293182         0.0234297           8         0.3820089         0.3703673         8         0.2189292         0.3874492         -0.4269003         0.0461216           9         0.3811821         0.3924245         9         0.2195701         0.4190918         -0.4239757         0.0679555           10         0.3809128         0.4158937         10         0.2207389         0.4527328         -0.4205002         0.0885781           11         0.381282         0.4407625         11         0.1748060         0.4890026         -0.5414662         0.1094468           12         0.382166         0.4944797         13         0.0878652         0.5802431         -0.7741090         0.139277           14         0.3857617         0.5231146         14         0.0897586         0.6292253         -0.7632447         0.2224712           15         0.3888927         0.5527115         15         0.0902047         0.6773320         -0.7632647         0.224718           16         0.3925409         0.583044         16         0.0947982         0.7233833         -0.7555012         0.2407083           17         0.3969254								
8         0.3820089         0.3703673         8         0.2189292         0.3874492         -0.4269003         0.0461216           9         0.3811821         0.3924245         9         0.2195701         0.4190918         -0.4239757         0.0679555           10         0.3809128         0.4407625         11         0.1748060         0.4890026         -0.5414662         0.199468           12         0.3821562         0.4669859         12         0.1092550         0.5520266         -0.7141090         0.1392777           13         0.3837249         0.9444797         13         0.0878652         0.5520241         -0.776203         0.7764418         0.2028442           15         0.3888927         0.5527115         15         0.0920647         0.6773320         -0.7632647         0.2247028           16         0.3925409         0.5830404         16         0.0947982         0.7233833         -0.758121         0.2440244           18         0.4020599         0.6447368         18         0.0014284         0.8054342         -0.7726000         0.2492448           19         0.447597         0.7055521         20         0.0901478         0.871215         -0.7888962         0.2207663           22								
9 0.3811821 0.3924245 9 0.2195701 0.4190918 -0.4239757 0.0679555 10 0.3809128 0.4158937 10 0.2207389 0.4527328 -0.4205002 0.0885781 11 0.3812282 0.4407625 11 0.1748060 0.4890026 -0.5414662 0.1094468 12 0.3821562 0.4669859 12 0.1092550 0.5320266 -0.7141090 0.1392777 13 0.3837249 0.4944797 13 0.0878652 0.5802431 -0.7710203 0.1734417 14 0.3859617 0.5231146 14 0.0897586 0.6292253 -0.7674418 0.2028442 15 0.3888927 0.5257115 15 0.0920647 0.6773320 -0.7632647 0.2254712 16 0.3925409 0.5830404 16 0.0947982 0.7233833 -0.7585012 0.2407088 17 0.3969254 0.6138222 17 0.0979683 0.7663137 -0.7531821 0.2482944 18 0.4020599 0.6447368 18 0.0914284 0.8054324 -0.7726000 0.2492448 19 0.4079515 0.6754344 19 0.0863901 0.8407277 -0.7882344 0.2447214 20 0.4145997 0.7055521 20 0.0901478 0.8712151 -0.7825666 0.2347990 21 0.4219996 0.7347339 21 0.0890848 0.8969376 -0.7888962 0.2207653 22 0.43301214 0.7626504 22 0.0887514 0.9183916 -0.7936595 0.0424010 23 0.4389507 0.7890179 23 0.0931559 0.9358304 -0.787760 0.1860699 24 0.4484489 0.8136125 24 0.0978834 0.9497960 -0.7817290 0.1673812 25 0.4585740 0.83662790 25 0.1029302 0.9608638 -0.7755429 0.1673812 26 0.4692781 0.8569326 26 0.1082940 0.9695662 -0.7693282 0.1314381 27 0.485083 0.8755552 27 0.1139739 0.9763678 -0.7628056 0.1151413 28 0.4922088 0.8921868 28 0.1199704 0.9866616 -0.7628056 0.1151413 28 0.4922088 0.8921868 28 0.1199704 0.986616 -0.7628056 0.1151413 28 0.4922088 0.8921868 28 0.1199704 0.9895662 -0.7693282 0.1314381 30 0.5167882 0.9198568 30 0.1329209 0.9889545 -0.7427943 0.0751178 31 0.5295506 0.9311586 31 0.1398806 0.9914166 -0.7358503 0.0667129 32 0.5425519 0.9409731 32 0.1471682 0.9933216 -0.7287481 0.005873 34 0.5690543 0.9567631 34 0.1627423 0.9959372 -0.7140126 0.0409445 35 0.586433 0.9567631 34 0.1627423 0.9959372 -0.7140126 0.0409445 36 0.5958874 0.9684093 33 0.1547875 0.9947959 -0.7214737 0.0477525 34 0.5690543 0.9950366 34 0.2766927 0.9999331 -0.6663024 0.0064909 37 0.6093131 0.9730036 37 0.1886557 0.9990331 -0.6666004 0.0064909 38 0.635699 0.985668 40 0.2769099 0.99993								
10								
11         0.3812282         0.4407625         11         0.1748060         0.4890026         -0.5414662         0.1094468           12         0.3821562         0.4669859         12         0.1092550         0.5320266         -0.7141090         0.1392777           13         0.3837249         0.4944797         13         0.0876852         0.5802431         -0.77170203         0.1734417           14         0.3858927         0.5527115         15         0.0920647         0.6773320         -0.7632647         0.2254712           16         0.3925409         0.5530404         16         0.0947982         0.733333         -0.7553121         0.2407088           17         0.3969254         0.6138222         17         0.0979683         0.7663137         -0.7531821         0.2484294           18         0.4020599         0.6447368         18         0.0914284         0.8054342         -0.7825606         0.2347990           21         0.4219956         0.7347339         21         0.0890848         0.8969376         -0.7888962         0.2207653           22         0.430124         0.7626504         22         0.0887514         0.91835804         -0.7877560         0.1860699           24         0.448								
12								
13         0.3837249         0.4944797         13         0.0878652         0.5802431         -0.7710203         0.1734417           14         0.3859617         0.5231146         14         0.0897586         0.6992253         -0.7674418         0.2028442           15         0.3888927         0.5527115         15         0.0920647         0.6773320         -0.7632647         0.2247088           17         0.3969254         0.6138222         17         0.0979683         0.7663137         -0.7531821         0.2484294           18         0.4020599         0.6447368         18         0.0914284         0.8054342         -0.7726000         0.2489248           19         0.4079515         0.6754344         19         0.0863901         0.8407277         -0.7882344         0.2447214           20         0.4145997         0.7055521         20         0.0901478         0.8712151         -0.788566         0.2347990           21         0.4219956         0.7347339         21         0.0890848         0.8969376         -0.7888962         0.2207653           22         0.4301214         0.7626504         22         0.0897584         0.9497960         -0.7817290         0.1673812           25         0.4585								
14         0.3859617         0.5231146         14         0.0897586         0.6292253         -0.7674418         0.2028442           15         0.3888927         0.5527115         15         0.0920647         0.6773320         -0.7632647         0.2254712           16         0.3925409         0.5830404         16         0.0947982         0.7233833         -0.7531821         0.2407088           17         0.3969254         0.6138222         17         0.0979683         0.7663137         -0.7531821         0.2484294           18         0.4020599         0.6447368         18         0.0914284         0.8054342         -0.7726000         0.2492448           19         0.4079515         0.6754344         19         0.0863901         0.840727         -0.7882344         0.2447214           20         0.4145997         0.7055521         20         0.0901478         0.88712151         -0.782666         0.234790           21         0.4219956         0.7347339         21         0.0887514         0.9183916         -0.788695         0.20207653           22         0.4301214         0.7626504         22         0.0887514         0.9183916         -0.788695         0.2042105           23         0.438597								
15         0.3888927         0.5527115         15         0.0920647         0.6773320         -0.7632647         0.2254712           16         0.3925409         0.5830404         16         0.0947982         0.7233833         -0.7585012         0.2407088           17         0.3969254         0.6138222         17         0.0979683         0.7663137         -0.7531821         0.2484244           18         0.4020599         0.6447368         18         0.09014284         0.8054342         -0.7726000         0.2492448           19         0.4079515         0.6754344         19         0.0863901         0.8407277         -0.7825666         0.2347990           21         0.4219956         0.7347339         21         0.0890448         0.8969376         -0.7888962         0.2207653           22         0.43484489         0.8136125         24         0.097884         0.9497960         -0.7817290         0.1673812           25         0.4585740         0.8362790         25         0.1029302         0.9608638         -0.7755429         0.1489752           26         0.4692781         0.8569326         26         0.1082940         0.9605662         -0.7628056         0.1151413           27         0.48								
16         0.3925409         0.5830404         16         0.0947982         0.7233833         -0.7585012         0.2407088           17         0.3969254         0.6138222         17         0.0979683         0.7663137         -0.7531821         0.2484294           18         0.4020599         0.6447368         18         0.0914284         0.8054342         -0.7726000         0.2492448           19         0.4079515         0.6754344         19         0.0863901         0.8407277         -0.7825666         0.2347990           21         0.4219956         0.7347339         21         0.0890848         0.8969376         -0.7888602         0.2207653           22         0.4301214         0.7626504         22         0.0887514         0.9183316         -0.7936595         0.2042105           23         0.4389507         0.7890179         23         0.0931559         0.9358304         -0.7672790         0.1860699           24         0.4844489         0.8136125         24         0.097884         0.9497960         -0.7817290         0.1673812           25         0.4585740         0.8362790         25         0.1029302         0.9608638         -0.7755429         0.1489752           26         0.4692								
17         0.3969254         0.6138222         17         0.0979683         0.7663137         -0.7731821         0.2482494           18         0.4020599         0.6447368         18         0.0914284         0.8054342         -0.7726000         0.2492448           19         0.4079515         0.6754344         19         0.0863901         0.8407277         -0.7825666         0.2347990           21         0.4219956         0.7347339         21         0.0890848         0.8969376         -0.788562         0.2207653           22         0.4301214         0.7626504         22         0.0887514         0.9183916         -0.7936595         0.2042105           23         0.4389507         0.7890179         23         0.0931559         0.9385804         -0.787760         0.1860699           24         0.4484489         0.816125         24         0.0978834         0.9497960         -0.7817290         0.1673812           25         0.4585740         0.8362790         25         0.1029302         0.9608638         -0.7755249         0.1489752           26         0.4692781         0.8569326         26         0.1082940         0.9695662         -0.7682328         0.13114381           27         0.48050								
18         0.4020599         0.6447368         18         0.0914284         0.8054342         -0.7726000         0.2492448           19         0.4079515         0.6754344         19         0.0863901         0.8407277         -0.7882344         0.2447214           20         0.4145997         0.7055521         20         0.0901478         0.8712151         -0.7825666         0.2347990           21         0.4219956         0.7347339         21         0.0890848         0.8969376         -0.7888962         0.2207653           22         0.4301214         0.7626504         22         0.0887514         0.9183916         -0.7936595         0.0242105           23         0.4389507         0.7890179         23         0.0931559         0.9358304         -0.7877760         0.1860699           24         0.4484489         0.8136125         24         0.0978834         0.949760         -0.7817290         0.1673812           25         0.4585740         0.8362790         25         0.1029302         0.9608638         -0.7755429         0.1489752           26         0.4692781         0.8569326         26         0.1082940         0.968662         -0.7628511         0.102870           27         0.480528								
19         0.4079515         0.6754344         19         0.0863901         0.8407277         -0.7882344         0.2447214           20         0.4145997         0.7055521         20         0.0901478         0.8712151         -0.7825666         0.2347990           21         0.421996         0.7347339         21         0.0890848         0.896376         -0.7888962         0.2207653           22         0.4301214         0.7626504         22         0.0890848         0.896336         -0.785659         0.22042105           23         0.4389507         0.7890179         23         0.0931559         0.9358304         -0.787760         0.1860699           24         0.4484489         0.8136125         24         0.0978834         0.9497960         -0.7817290         0.1673812           25         0.4585740         0.8362790         25         0.1029302         0.9608638         -0.7755429         0.1489752           26         0.4692781         0.8569326         26         0.1082940         0.963668         -0.7628056         0.11314381           27         0.4305083         0.875552         27         0.1139739         0.9763678         -0.7628056         0.1151413           28         0.4922088<								
20         0.4445997         0.7055521         20         0.901478         0.8712151         -0.7825666         0.2347990           21         0.4219956         0.7347339         21         0.0890848         0.8969376         -0.7888962         0.2207653           22         0.4301214         0.7626504         22         0.0887514         0.9183916         -0.7936595         0.2042105           23         0.4389507         0.7890179         23         0.0931559         0.9358304         -0.7877760         0.1860699           24         0.4484489         0.8136125         24         0.0978834         0.9497960         -0.7817290         0.1673812           25         0.4585740         0.8362790         25         0.1029302         0.9608638         -0.7752429         0.1489752           26         0.4692781         0.8569326         26         0.1089940         0.969662         -0.7628056         0.1151413           28         0.4922088         0.8921868         28         0.1199704         0.9816616         -0.7562611         0.1002870           29         0.5043216         0.9969138         29         0.1262852         0.9857716         -0.7495939         0.0869518           30         0.51678								
21         0.4219956         0.7347339         21         0.0890848         0.8969376         -0.7888962         0.2207653           22         0.4301214         0.7626504         22         0.0887514         0.9183916         -0.7936595         0.2042105           23         0.4389507         0.7890179         23         0.0931559         0.9358304         -0.787760         0.1866699           24         0.4484489         0.8136125         24         0.0978834         0.9497960         -0.7817290         0.1673812           25         0.4585740         0.8362790         25         0.1029302         0.9608638         -0.7755429         0.1489752           26         0.4692781         0.8569326         26         0.1082940         0.9696662         -0.7628056         0.1314381           27         0.4805083         0.8755552         27         0.11397399         0.9763678         -0.7628056         0.1151413           28         0.4922088         0.8921868         28         0.1199704         0.9816616         -0.7628056         0.1151413           30         0.5167882         0.9198568         30         0.1329290         0.9889545         -0.7427943         0.0751178           31         0.529								
22         0.4301214         0.7626504         22         0.0887514         0.9183916         -0.7936595         0.2042105           23         0.4389507         0.7890179         23         0.0931559         0.9358304         -0.7877760         0.1860699           24         0.4484489         0.8136125         24         0.0978834         0.9497960         -0.7817290         0.1673812           25         0.4585740         0.8362790         25         0.1029302         0.9608638         -0.7755429         0.1489752           26         0.4692781         0.8569326         26         0.1082940         0.9695662         -0.7692328         0.1314381           27         0.4805083         0.8755552         27         0.1139739         0.9763678         -0.7628056         0.1151413           28         0.4922088         0.8921868         28         0.1199704         0.9816616         -0.7495939         0.0869518           30         0.5167882         0.9198568         30         0.1329209         0.9889545         -0.7427943         0.0751178           31         0.5295506         0.9311586         31         0.1398806         0.9914166         -0.7358503         0.0647129           32         0.542								
23         0.4389507         0.7890179         23         0.0931559         0.9358304         -0.7877760         0.1860699           24         0.4484489         0.8136125         24         0.0978834         0.9497960         -0.7817290         0.1673812           25         0.4585740         0.8362790         25         0.1029302         0.9608638         -0.7755429         0.1489752           26         0.4692781         0.8569326         26         0.1082940         0.9695662         -0.7692328         0.1314381           27         0.4805083         0.8755552         27         0.1139739         0.9763678         -0.7628056         0.1151413           28         0.4922088         0.8921868         28         0.1199704         0.981616         -0.7562611         0.1002870           29         0.5043216         0.9069138         29         0.1262852         0.9857716         -0.7497939         0.0869518           30         0.5167882         0.9198568         30         0.1329209         0.9889545         -0.7427943         0.0751178           31         0.5295566         0.9311586         31         0.1398806         0.9914166         -0.7358503         0.0647129           32         0.5425								
24         0.4484489         0.8136125         24         0.0978834         0.9497960         -0.7817290         0.1673812           25         0.4585740         0.8362790         25         0.1029302         0.9608638         -0.7755429         0.1489752           26         0.4692781         0.8569326         26         0.1082940         0.9695662         -0.7692328         0.1314381           27         0.4805083         0.8755552         27         0.1139739         0.9763678         -0.7628056         0.1151413           28         0.4922088         0.8921868         28         0.1199704         0.9816616         -0.7562611         0.1002870           29         0.5043216         0.9069138         29         0.1262852         0.9857716         -0.7495939         0.0869518           30         0.5167882         0.9198568         30         0.1329209         0.9889545         -0.7427943         0.0751178           31         0.5295506         0.9311586         31         0.1398806         0.9914166         -0.7358503         0.0647129           32         0.5425519         0.9409731         32         0.1471682         0.993216         -0.7214737         0.0477525           34         0.5690								
25         0.4585740         0.8362790         25         0.1029302         0.9608638         -0.7755429         0.1489752           26         0.4692781         0.8569326         26         0.1082940         0.9695662         -0.7692328         0.1314381           27         0.4805083         0.8755552         27         0.1139739         0.9763678         -0.7628056         0.1151413           28         0.4922088         0.8921868         28         0.1199704         0.9816616         -0.7562611         0.1002870           29         0.5043216         0.9069138         29         0.1262852         0.9857716         -0.7495939         0.0869518           30         0.5167882         0.9198568         30         0.1329209         0.9889545         -0.7427943         0.0751178           31         0.5295506         0.9311586         31         0.1398806         0.9914166         -0.7358503         0.0647129           32         0.5425519         0.9409731         32         0.1471682         0.9933216         -0.722481         0.0556323           33         0.5557373         0.9494569         33         0.1547875         0.9947959         -0.7214737         0.0477525           34         0.5690								
26         0.4692781         0.8569326         26         0.1082940         0.9695662         -0.7692328         0.1314381           27         0.4805083         0.8755552         27         0.1139739         0.9763678         -0.7628056         0.1151413           28         0.4922088         0.8921868         28         0.1199704         0.9816616         -0.7562611         0.1002870           29         0.5043216         0.9069138         29         0.1262852         0.9857716         -0.7495939         0.0869518           30         0.5167882         0.9198568         30         0.1329209         0.9889545         -0.7427943         0.06771178           31         0.5295506         0.9311586         31         0.1398806         0.9914166         -0.7358503         0.0647129           32         0.542519         0.9409731         32         0.1471682         0.9933216         -0.724781         0.0556323           33         0.5557373         0.9494569         33         0.1547875         0.9947959         -0.7214737         0.0477525           34         0.5690543         0.9567631         34         0.1627423         0.9955372         -0.7140126         0.0409445           35         0.5824	24	0.4484489	0.8136125	24	0.0978834	0.9497960	-0.7817290	0.1673812
27         0.4805083         0.8755552         27         0.1139739         0.9763678         -0.7628056         0.1151413           28         0.4922088         0.8921868         28         0.1199704         0.9816616         -0.7562611         0.1002870           29         0.5043216         0.9069138         29         0.1262852         0.9857716         -0.7495939         0.0869518           30         0.5167882         0.9198568         30         0.1329209         0.9889545         -0.7427943         0.0751178           31         0.5295506         0.9311586         31         0.1398806         0.9914166         -0.7358503         0.0647129           32         0.5425519         0.9409731         32         0.1471682         0.9933216         -0.7287481         0.0556323           33         0.5557373         0.9494569         33         0.1547875         0.9947959         -0.7140126         0.0409445           35         0.5824533         0.9630360         35         0.1710365         0.9968221         -0.7063515         0.0350829           36         0.5958874         0.9684093         36         0.1796734         0.9975092         -0.6984776         0.0300492           37         0.609								
28         0.4922088         0.8921868         28         0.1199704         0.9816616         -0.7562611         0.1002870           29         0.5043216         0.9069138         29         0.1262852         0.9857716         -0.7495939         0.0869518           30         0.5167882         0.9198568         30         0.1329209         0.9889545         -0.7427943         0.0751178           31         0.5295506         0.9311586         31         0.1398806         0.9914166         -0.7358503         0.0647129           32         0.5425519         0.9409731         32         0.1471682         0.9933216         -0.7287481         0.0556323           33         0.5557373         0.9494569         33         0.1547875         0.9947959         -0.7214737         0.0477525           34         0.5690543         0.9567631         34         0.1627423         0.9959372         -0.7140126         0.0409445           35         0.5824533         0.9630360         35         0.1710365         0.9968221         -0.7063515         0.0350829           36         0.5958874         0.9684093         36         0.1796734         0.9975092         -0.6984776         0.0300492           37         0.609								
29         0.5043216         0.9069138         29         0.1262852         0.9857716         -0.7495939         0.0869518           30         0.5167882         0.9198568         30         0.1329209         0.9889545         -0.7427943         0.0751178           31         0.5295506         0.9311586         31         0.1398806         0.9914166         -0.7358503         0.0647129           32         0.5425519         0.9409731         32         0.1471682         0.9933216         -0.7287481         0.0556323           33         0.5557373         0.9494569         33         0.1547875         0.9947959         -0.7214737         0.0477525           34         0.5690543         0.9567631         34         0.1627423         0.9959372         -0.7140126         0.0409445           35         0.5824533         0.9630360         35         0.1710365         0.9968221         -0.7063515         0.0350829           36         0.5958874         0.9684093         36         0.1796734         0.9975092         -0.6984776         0.0300492           37         0.6093131         0.9730036         37         0.1886557         0.9984595         -0.6820475         0.0220413           39         0.635								
30         0.5167882         0.9198568         30         0.1329209         0.9889545         -0.7427943         0.0751178           31         0.5295506         0.9311586         31         0.1398806         0.9914166         -0.7358503         0.0647129           32         0.5425519         0.9409731         32         0.1471682         0.9933216         -0.7287481         0.0556323           33         0.5557373         0.9494569         33         0.1547875         0.9947959         -0.7214737         0.0477525           34         0.5690543         0.9567631         34         0.1627423         0.9959372         -0.7140126         0.0409445           35         0.5824533         0.9630360         35         0.1710365         0.9968221         -0.7063515         0.0350829           36         0.5958874         0.9684093         36         0.1796734         0.9975092         -0.6984776         0.0300492           37         0.6093131         0.9730036         37         0.1886557         0.9980434         -0.6903796         0.0257346           38         0.6226897         0.9769268         38         0.1979857         0.9984595         -0.6820475         0.0220413           39         0.635								
31         0.5295506         0.9311586         31         0.1398806         0.9914166         -0.7358503         0.0647129           32         0.5425519         0.9409731         32         0.1471682         0.9933216         -0.7287481         0.0556323           33         0.5557373         0.9494569         33         0.1547875         0.9947959         -0.7214737         0.0477525           34         0.5690543         0.9567631         34         0.1627423         0.9959372         -0.7140126         0.0409445           35         0.5824533         0.9630360         35         0.1710365         0.9968221         -0.7063515         0.0350829           36         0.5958874         0.9684093         36         0.1796734         0.9975092         -0.6984776         0.0300492           37         0.6093131         0.9730036         37         0.1886557         0.9980434         -0.6903796         0.0257346           38         0.6226897         0.9769268         38         0.1979857         0.9984595         -0.6820475         0.0220413           39         0.6359799         0.9802740         39         0.2076647         0.9987842         -0.6734729         0.0188827           40         0.649					0.1262852	0.9857716		
32         0.5425519         0.9409731         32         0.1471682         0.9933216         -0.7287481         0.0556323           33         0.5557373         0.9494569         33         0.1547875         0.9947959         -0.7214737         0.0477525           34         0.5690543         0.9567631         34         0.1627423         0.9959372         -0.7140126         0.0409445           35         0.5824533         0.9630360         35         0.1710365         0.9968221         -0.7063515         0.0350829           36         0.5958874         0.9684093         36         0.1796734         0.9975092         -0.6984776         0.0300492           37         0.6093131         0.9730036         37         0.1886557         0.9980434         -0.6993796         0.0257346           38         0.6226897         0.9769268         38         0.1979857         0.9984595         -0.6820475         0.0220413           39         0.6359799         0.9802740         39         0.2076647         0.9987842         -0.6734729         0.0188827           40         0.6491494         0.9831283         40         0.2176929         0.9990381         -0.6646490         0.0161828           41         0.662								
33         0.5557373         0.9494569         33         0.1547875         0.9947959         -0.7214737         0.0477525           34         0.5690543         0.9567631         34         0.1627423         0.9959372         -0.7140126         0.0409445           35         0.5824533         0.9630360         35         0.1710365         0.9968221         -0.7063515         0.0350829           36         0.5958874         0.9684093         36         0.1796734         0.9975092         -0.6984776         0.0300492           37         0.6093131         0.9730036         37         0.1886557         0.9980434         -0.6903796         0.0257346           38         0.6226897         0.9769268         38         0.1979857         0.9984595         -0.6820475         0.0220413           39         0.6359799         0.9802740         39         0.2076647         0.9987842         -0.6734729         0.0188827           40         0.6491494         0.9831283         40         0.2176929         0.9999381         -0.6646490         0.0161828           41         0.6621669         0.9855618         41         0.2280697         0.9999334         -0.6462344         0.0119040           43         0.687								
34         0.5690543         0.9567631         34         0.1627423         0.9959372         -0.7140126         0.0409445           35         0.5824533         0.9630360         35         0.1710365         0.9968221         -0.7063515         0.0350829           36         0.5958874         0.9684093         36         0.1796734         0.9975092         -0.6984776         0.0300492           37         0.6093131         0.9730036         37         0.1886557         0.9980434         -0.6903796         0.0257346           38         0.6226897         0.9769268         38         0.1979857         0.9984595         -0.6820475         0.0220413           39         0.6359799         0.9802740         39         0.2076647         0.9987842         -0.6734729         0.0188827           40         0.6491494         0.9831283         40         0.2176929         0.9990381         -0.6646490         0.0161828           41         0.6621669         0.9855618         41         0.2280697         0.9992371         -0.6555707         0.0138756           42         0.6750039         0.9876365         42         0.2387931         0.9993934         -0.6462344         0.0119040           43         0.687								
35         0.5824533         0.9630360         35         0.1710365         0.9968221         -0.7063515         0.0350829           36         0.5958874         0.9684093         36         0.1796734         0.9975092         -0.6984776         0.0300492           37         0.6093131         0.9730036         37         0.1886557         0.9980434         -0.6903796         0.0257346           38         0.6226897         0.9769268         38         0.1979857         0.9984595         -0.6820475         0.0220413           39         0.6359799         0.9802740         39         0.2076647         0.9987842         -0.6734729         0.0188827           40         0.6491494         0.9831283         40         0.2176929         0.9999381         -0.6646490         0.0161828           41         0.6621669         0.9855618         41         0.2280697         0.9999331         -0.6555707         0.0138756           42         0.6750039         0.9876365         42         0.2387931         0.999334         -0.6462344         0.0119040           43         0.6876350         0.9894058         43         0.2498600         0.9995164         -0.6366386         0.0102189           45         0.7121								
36         0.5958874         0.9684093         36         0.1796734         0.9975092         -0.6984776         0.0300492           37         0.6093131         0.9730036         37         0.1886557         0.9980434         -0.6903796         0.0257346           38         0.6226897         0.9769268         38         0.1979857         0.9984595         -0.6820475         0.0220413           39         0.6359799         0.9802740         39         0.2076647         0.9987842         -0.6734729         0.0188827           40         0.6491494         0.9831283         40         0.2176929         0.9990381         -0.6646490         0.0161828           41         0.6621669         0.9855618         41         0.2280697         0.9992371         -0.6555707         0.0138756           42         0.6750039         0.9876365         42         0.2387931         0.999334         -0.6462344         0.0119040           43         0.6876350         0.9894058         43         0.2498600         0.9995164         -0.6366386         0.0102189           44         0.7000374         0.99922034         45         0.2730042         0.9996903         -0.6166700         0.0075457           46         0.724	34	0.5690543	0.9567631	34		0.9959372	-0.7140126	0.0409445
37         0.6093131         0.9730036         37         0.1886557         0.9980434         -0.6903796         0.0257346           38         0.6226897         0.9769268         38         0.1979857         0.9984595         -0.6820475         0.0220413           39         0.6359799         0.9802740         39         0.2076647         0.9987842         -0.6734729         0.0188827           40         0.6491494         0.9831283         40         0.2176929         0.9990381         -0.6646490         0.0161828           41         0.6621669         0.9855618         41         0.2280697         0.9992371         -0.6555707         0.0138756           42         0.6750039         0.9876365         42         0.2387931         0.999334         -0.6462344         0.0119040           43         0.6876350         0.9894058         43         0.2498600         0.9995164         -0.6366386         0.0102189           44         0.7000374         0.9909151         44         0.2612657         0.999603         -0.6166700         0.0075457           46         0.7240781         0.9933037         46         0.2850678         0.9997511         -0.6063024         0.0064909           47         0.73568								
38         0.6226897         0.9769268         38         0.1979857         0.9984595         -0.6820475         0.0220413           39         0.6359799         0.9802740         39         0.2076647         0.9987842         -0.6734729         0.0188827           40         0.6491494         0.9831283         40         0.2176929         0.9990381         -0.6646490         0.0161828           41         0.6621669         0.9855618         41         0.2280697         0.9992371         -0.6555707         0.0138756           42         0.6750039         0.9876365         42         0.2387931         0.9993934         -0.6462344         0.0119040           43         0.6876350         0.9894058         43         0.2498600         0.9995164         -0.6366386         0.0102189           44         0.7000374         0.9909151         44         0.2612657         0.999603         -0.6166700         0.0075457           46         0.7240781         0.9933037         46         0.2850678         0.9997511         -0.6063024         0.0064909           47         0.7356838         0.9942441         47         0.2974178         0.999795         -0.5957261         0.0055876           48         0.74699								
39       0.6359799       0.9802740       39       0.2076647       0.9987842       -0.6734729       0.0188827         40       0.6491494       0.9831283       40       0.2176929       0.9990381       -0.6646490       0.0161828         41       0.6621669       0.9855618       41       0.2280697       0.9992371       -0.6555707       0.0138756         42       0.6750039       0.9876365       42       0.2387931       0.9993934       -0.6462344       0.0119040         43       0.6876350       0.9894058       43       0.2498600       0.9995164       -0.6366386       0.0102189         44       0.7000374       0.9909151       44       0.2612657       0.9996135       -0.6267832       0.0087781         45       0.7121910       0.9922034       45       0.2730042       0.9996903       -0.6166700       0.0075457         46       0.7240781       0.9933037       46       0.2850678       0.9997511       -0.6063024       0.0064909         47       0.7356838       0.9942441       47       0.2974178       0.9998381       -0.5848908       0.0048135         49       0.7580011       0.9957369       49       0.3230613       0.9998835       -0.5624823 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
40       0.6491494       0.9831283       40       0.2176929       0.9990381       -0.6646490       0.0161828         41       0.6621669       0.9855618       41       0.2280697       0.9992371       -0.6555707       0.0138756         42       0.6750039       0.9876365       42       0.2387931       0.9993934       -0.6462344       0.0119040         43       0.6876350       0.9894058       43       0.2498600       0.9995164       -0.6366386       0.0102189         44       0.7000374       0.9909151       44       0.2612657       0.9996135       -0.6267832       0.0087781         45       0.7121910       0.9922034       45       0.2730042       0.9996903       -0.6166700       0.0075457         46       0.7240781       0.9933037       46       0.2850678       0.9997511       -0.6063024       0.0064909         47       0.7356838       0.9942441       47       0.2974178       0.9998381       -0.5848908       0.0048135         49       0.7580011       0.9957369       49       0.3230613       0.9998889       -0.5737984       0.0041496         50       0.7686936       0.9963268       50       0.3363170       30.9998935       -0.5624823 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								
41       0.6621669       0.9855618       41       0.2280697       0.9992371       -0.6555707       0.0138756         42       0.6750039       0.9876365       42       0.2387931       0.9993934       -0.6462344       0.0119040         43       0.6876350       0.9894058       43       0.2498600       0.9995164       -0.6366386       0.0102189         44       0.7000374       0.9909151       44       0.2612657       0.9996135       -0.6267832       0.0087781         45       0.7121910       0.9922034       45       0.2730042       0.9996903       -0.6166700       0.0075457         46       0.7240781       0.9933037       46       0.2850678       0.9997511       -0.6063024       0.0064909         47       0.7356838       0.9942441       47       0.2974178       0.9997995       -0.5957261       0.0055876         48       0.7469950       0.9950484       48       0.3100845       0.9998381       -0.5848908       0.0048135         49       0.7580011       0.9957369       49       0.3230613       0.9998889       -0.5737984       0.0035799         51       0.7790657       0.9968326       51       0.3498360       0.9999133       -0.5509544 <td< td=""><td>39</td><td>0.0359799</td><td></td><td>39</td><td>0.2070047</td><td>0.9987842</td><td>-0.0734729</td><td></td></td<>	39	0.0359799		39	0.2070047	0.9987842	-0.0734729	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$								
43       0.6876350       0.9894058       43       0.2498600       0.9995164       -0.6366386       0.0102189         44       0.7000374       0.9909151       44       0.2612657       0.9996135       -0.6267832       0.0087781         45       0.7121910       0.9922034       45       0.2730042       0.9996903       -0.6166700       0.0075457         46       0.7240781       0.9933037       46       0.2850678       0.9997511       -0.6063024       0.0064909         47       0.7356838       0.9942441       47       0.2974178       0.9997995       -0.5957261       0.0055876         48       0.7469950       0.9950484       48       0.3100845       0.9998381       -0.5848908       0.0048135         49       0.7580011       0.9957369       49       0.3230613       0.9998689       -0.5737984       0.0041496         50       0.7686936       0.9963268       50       0.3363170       30.9998935       -0.5624823       0.0035799         51       0.7790657       0.9968326       51       0.3498360       0.9999133       -0.5509544       0.0030905								
44       0.7000374       0.9909151       44       0.2612657       0.9996135       -0.6267832       0.0087781         45       0.7121910       0.9922034       45       0.2730042       0.9996903       -0.6166700       0.0075457         46       0.7240781       0.9933037       46       0.2850678       0.9997511       -0.6063024       0.0064909         47       0.7356838       0.9942441       47       0.2974178       0.9997995       -0.5957261       0.0055876         48       0.7469950       0.9950484       48       0.3100845       0.9998381       -0.5848908       0.0048135         49       0.7580011       0.9957369       49       0.3230613       0.9998689       -0.5737984       0.0041496         50       0.7686936       0.9963268       50       0.3363170       30.9998935       -0.5624823       0.0035799         51       0.7790657       0.9968326       51       0.3498360       0.9999133       -0.5509544       0.0030905								
$\begin{array}{cccccccccccccccccccccccccccccccccccc$								
46       0.7240781       0.9933037       46       0.2850678       0.9997511       -0.6063024       0.0064909         47       0.7356838       0.9942441       47       0.2974178       0.9997995       -0.5957261       0.0055876         48       0.7469950       0.9950484       48       0.3100845       0.9998381       -0.5848908       0.0048135         49       0.7580011       0.9957369       49       0.3230613       0.9998689       -0.5737984       0.0041496         50       0.7686936       0.9963268       50       0.3363170       30.9998935       -0.5624823       0.0035799         51       0.7790657       0.9968326       51       0.3498360       0.9999133       -0.5509544       0.0030905								
47       0.7356838       0.9942441       47       0.2974178       0.9997995       -0.5957261       0.0055876         48       0.7469950       0.9950484       48       0.3100845       0.9998381       -0.5848908       0.0048135         49       0.7580011       0.9957369       49       0.3230613       0.9998689       -0.5737984       0.0041496         50       0.7686936       0.9963268       50       0.3363170       30.9998935       -0.5624823       0.0035799         51       0.7790657       0.9968326       51       0.3498360       0.9999133       -0.5509544       0.0030905								
48       0.7469950       0.9950484       48       0.3100845       0.9998381       -0.5848908       0.0048135         49       0.7580011       0.9957369       49       0.3230613       0.9998689       -0.5737984       0.0041496         50       0.7686936       0.9963268       50       0.3363170       30.9998935       -0.5624823       0.0035799         51       0.7790657       0.9968326       51       0.3498360       0.9999133       -0.5509544       0.0030905								
49       0.7580011       0.9957369       49       0.3230613       0.9998689       -0.5737984       0.0041496         50       0.7686936       0.9963268       50       0.3363170       30.9998935       -0.5624823       0.0035799         51       0.7790657       0.9968326       51       0.3498360       0.9999133       -0.5509544       0.0030905								
50     0.7686936     0.9963268     50     0.3363170     30.9998935     -0.5624823     0.0035799       51     0.7790657     0.9968326     51     0.3498360     0.9999133     -0.5509544     0.0030905								
$51  0.7790657  0.9968326 \qquad 51  0.3498360  0.9999133  -0.5509544  0.0030905$								
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EO 0.700119E 0.0079### EO 0.969#010 0.000000 0.5900070 0.009###								
	52	0.7891125	0.9972666	52	0.3636012	0.9999293	-0.5392278	0.0026699
53 0.7988310 0.9976395 53 0.3775937 0.9999421 -0.5273172 0.0023081	53 							