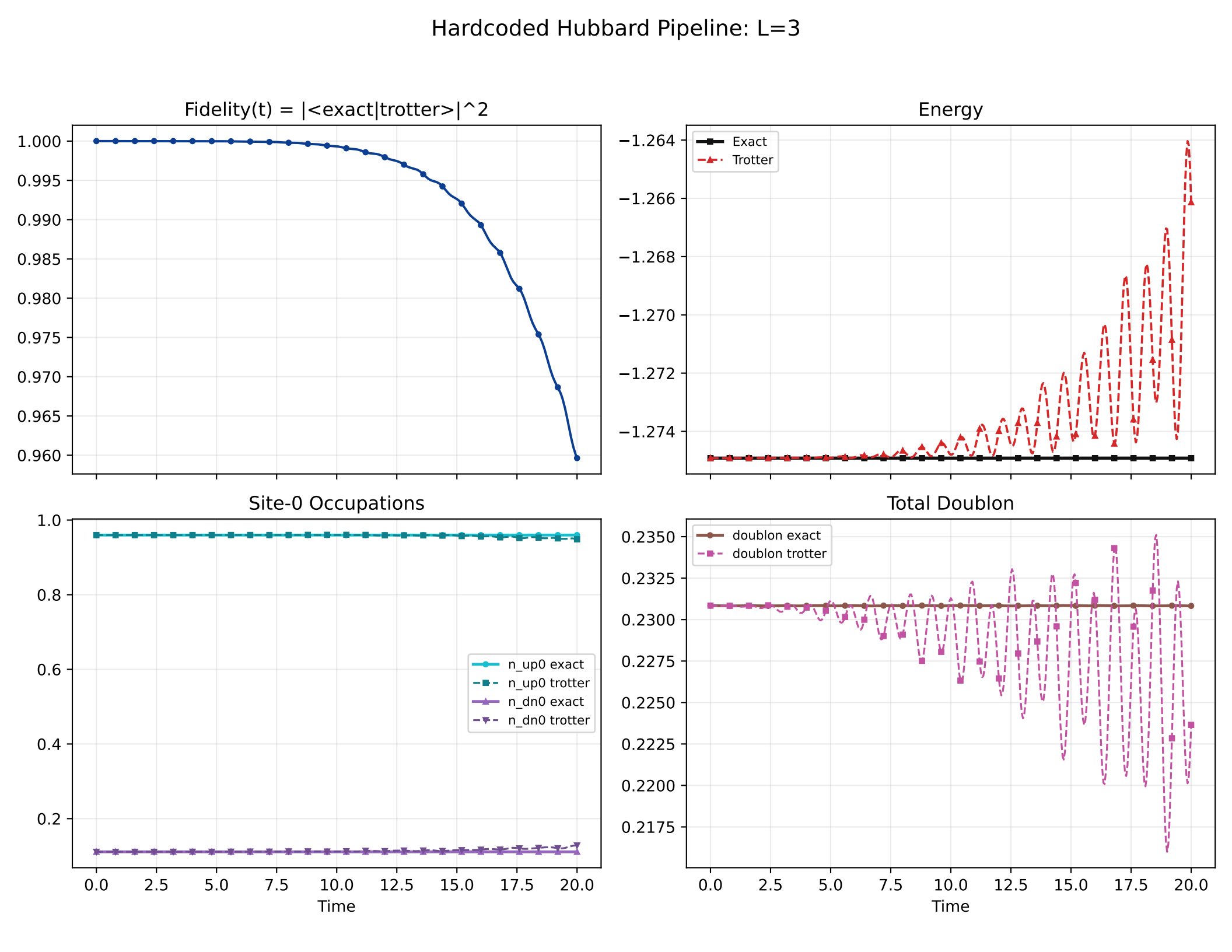
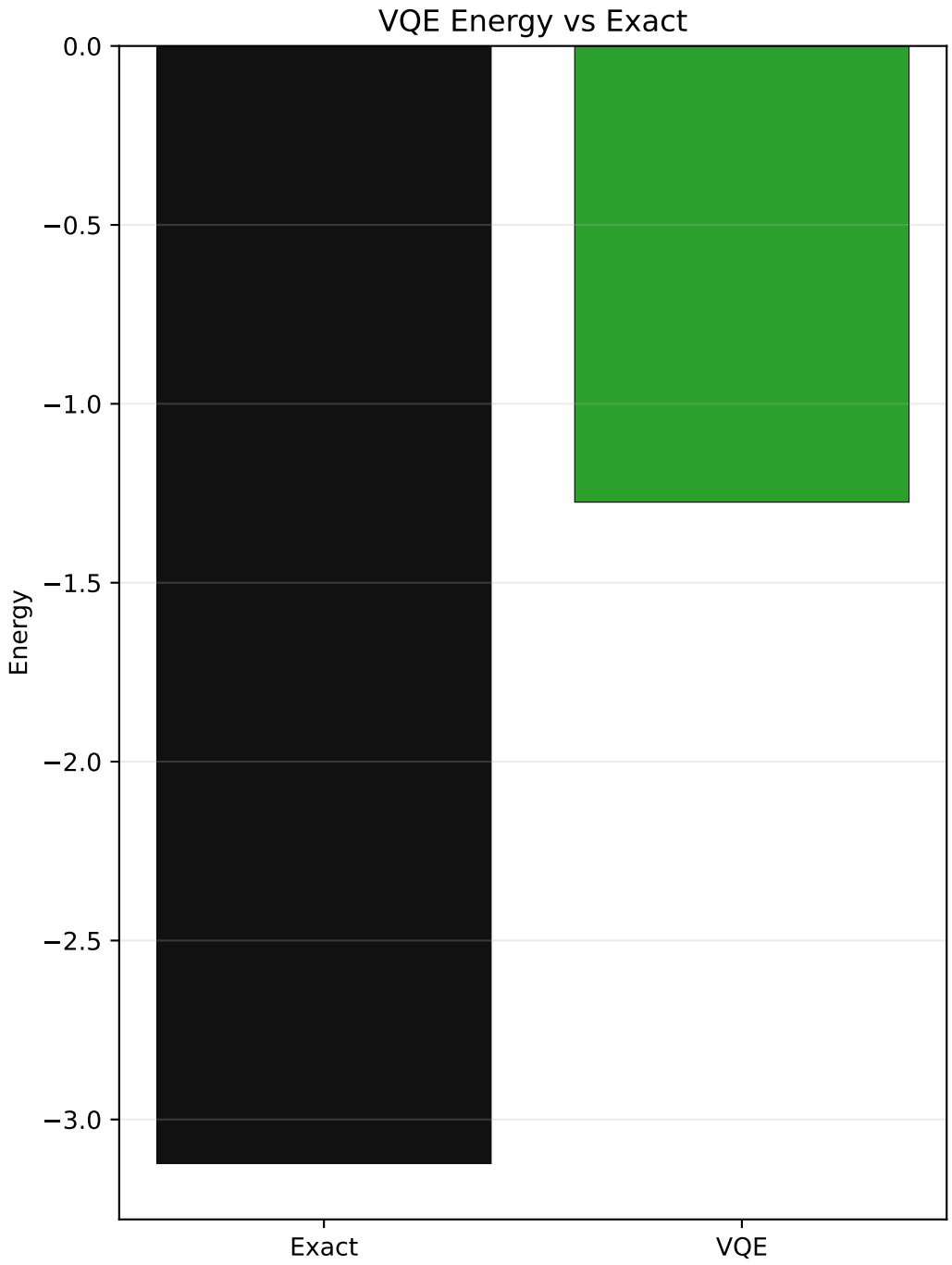
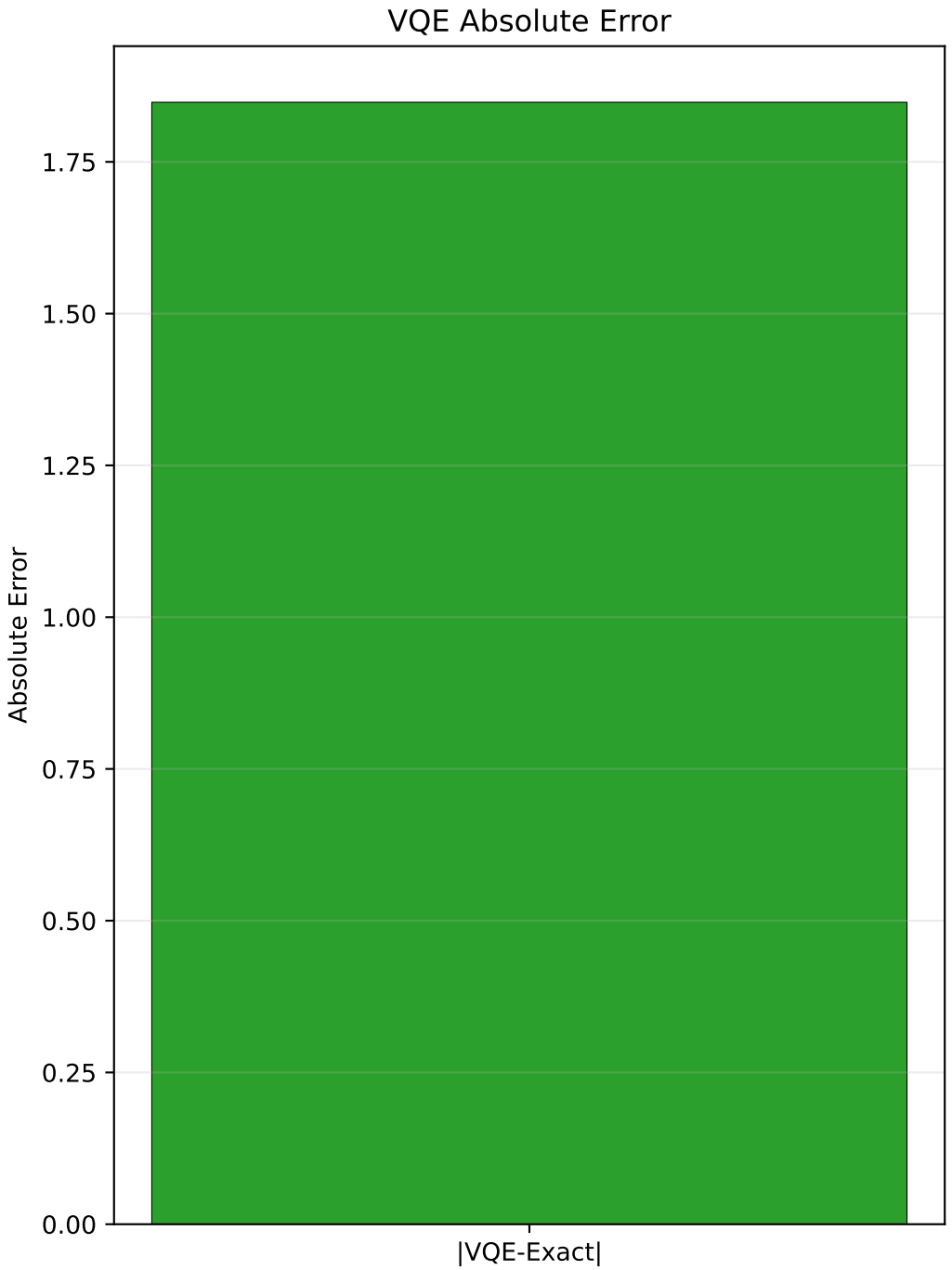

Hardcoded Hubbard Pipeline: L=3
Fidelity(t) = |<exact|trotter>|^2
1.000
0.995
0.990
0.985
0.980
0.975
0.970
0.965
0.960
Energy
Exact
Trotter
−1.264
−1.266
−1.268
−1.270
−1.272
−1.274
Site-0 Occupations
n_up0 exact
n_up0 trotter
n_dn0 exact
n_dn0 trotter
1.0
0.8
0.6
0.4
0.2
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
Time
Total Doublon
doublon exact
doublon trotter
0.2350
0.2325
0.2300
0.2275
0.2250
0.2225
0.2200
0.2175
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
Time

VQE energy is reported explicitly and is not inferred from Trotter t=0.





```
Hardcoded Hubbard pipeline summary

settings: {"L": 3, "t": 1.0, "u": 4.0, "dv": 0.0, "boundary": "periodic", "ordering": "blocked", "t_final": 20.0, "num_times":
ground_state_exact_energy: -3.123105625618
vqe_energy: -1.2749172082424445
qpe_energy_estimate: -1.265625
initial_state_source: vqe
hamiltonian_terms: 22
reference_sanity: {'checked': False, 'reason': 'no matching bundled reference for these settings'}
```