

1 HYPER-PARAMETERS FOUND

This documents holds the tables for the hyper-parameters found for each model's experiment (1 and 2), horizon (1,5,10,20), and configuration (0, Firm, Tech, 1)

2 EXPERIMENT 1

Table 1: Hyperparameters for BiTCN in experiment 1 and horizon 1

Hyperparameters	Options
hidden_size	16
dropout	0.0015855562021411362
learning_rate	0.001
scaler_type	robust
max_steps	500
batch_size	128
windows_batch_size	1024

Table 2: Hyperparameters for BiTCN in experiment 1 and horizon 1

Hyperparameters	Options
hidden_size	32
dropout	0.2931686241980131
learning_rate	0.01
scaler_type	standard
max_steps	1000
batch_size	128
windows_batch_size	1024

Table 3: Hyperparameters for NHITS in experiment 1 and horizon 1

Hyperparameters	Options
n_pool_kernel_size	(1, 1, 1)
n_freq_downsample	(180, 60, 1)
learning_rate	0.0005
scaler_type	robust
max_steps	1500.0
batch_size	64
windows_batch_size	1024

Table 4: Hyperparameters for NHITS in experiment 1 and horizon 1

Hyperparameters	Options
n_pool_kernel_size	(1, 1, 1)
n_freq_downsample	(24, 12, 1)
learning_rate	0.0005
scaler_type	standard
max_steps	800.0
batch_size	128
windows_batch_size	1024

Table 5: Hyperparameters for TFT in experiment 1 and horizon 1

Hyperparameters	Options
hidden_size	256
n_head	4
learning_rate	5e-05
scaler_type	standard
max_steps	500
batch_size	64
windows_batch_size	512

Table 6: Hyperparameters for TFT in experiment 1 and horizon 1

Hyperparameters	Options
hidden_size	128
n_head	4
learning_rate	0.0001
scaler_type	standard
max_steps	2000
batch_size	64
windows_batch_size	1024

Table 7: Hyperparameters for TiDE in experiment 1 and horizon 1

Hyperparameters	Options
hidden_size	512
decoder_output_dim	16
temporal_decoder_dim	32
num_encoder_layers	3
num_decoder_layers	2
temporal_width	8
dropout	0.2
layernorm	False
learning_rate	5e-05
scaler_type	standard
max_steps	1200.0
batch_size	256
windows_batch_size	1024

Table 8: Hyperparameters for TiDE in experiment 1 and horizon 1

Hyperparameters	Options
hidden_size	1024
decoder_output_dim	16
temporal_decoder_dim	64
num_encoder_layers	3
num_decoder_layers	3
temporal_width	8
dropout	0.1
layernorm	False
learning_rate	0.0005
scaler_type	standard
max_steps	1200.0
batch_size	128
windows_batch_size	512

Table 9: Hyperparameters for BiTCN in experiment 1 and horizon 5

Hyperparameters	Options
hidden_size	32
dropout	0.0030832791003590487
learning_rate	0.005
scaler_type	standard
max_steps	1000
batch_size	256
windows_batch_size	1024

Table 10: Hyperparameters for BiTCN in experiment 1 and horizon 5

Hyperparameters	Options
hidden_size	16
dropout	0.045104628910584615
learning_rate	0.0005
scaler_type	standard
max_steps	2000
batch_size	128
windows_batch_size	1024

Table 11: Hyperparameters for NHITS in experiment 1 and horizon 5

Hyperparameters	Options
n_pool_kernel_size	(1, 1, 1)
n_freq_downsample	(180, 60, 1)
learning_rate	0.0005
scaler_type	standard
max_steps	1100.0
batch_size	128
windows_batch_size	1024

Table 12: Hyperparameters for NHITS in experiment 1 and horizon 5

Hyperparameters	Options
n_pool_kernel_size	(4, 4, 4)
n_freq_downsample	(60, 8, 1)
learning_rate	0.001
scaler_type	standard
max_steps	1400.0
batch_size	128
windows_batch_size	256

Table 13: Hyperparameters for TFT in experiment 1 and horizon 5

Hyperparameters	Options
hidden_size	256
n_head	8
learning_rate	0.0005
scaler_type	standard
max_steps	1000
batch_size	128
windows_batch_size	256

Table 14: Hyperparameters for TFT in experiment 1 and horizon 5

Hyperparameters	Options
hidden_size	128
n_head	4
learning_rate	0.005
scaler_type	robust
max_steps	2000
batch_size	128
windows_batch_size	1024

Table 15: Hyperparameters for TiDE in experiment 1 and horizon 5

Hyperparameters	Options
hidden_size	512
decoder_output_dim	8
temporal_decoder_dim	32
num_encoder_layers	3
num_decoder_layers	2
temporal_width	8
dropout	0.0
layernorm	False
learning_rate	0.0001
scaler_type	robust
max_steps	1000.0
batch_size	128
windows_batch_size	512

Table 16: Hyperparameters for TiDE in experiment 1 and horizon 5

Hyperparameters	Options
hidden_size	1024
decoder_output_dim	32
temporal_decoder_dim	64
num_encoder_layers	2
num_decoder_layers	2
temporal_width	8
dropout	0.1
layernorm	False
learning_rate	0.0005
scaler_type	standard
max_steps	1100.0
batch_size	128
windows_batch_size	1024

Table 17: Hyperparameters for BiTCN in experiment 1 and horizon 10

Hyperparameters	Options
hidden_size	32
dropout	0.006805117506399672
learning_rate	0.001
scaler_type	standard
max_steps	2000
batch_size	64
windows_batch_size	1024

Table 18: Hyperparameters for BiTCN in experiment 1 and horizon 10

Hyperparameters	Options
hidden_size	16
dropout	0.028560683052457517
learning_rate	0.005
scaler_type	robust
max_steps	2000
batch_size	128
windows_batch_size	512

Table 19: Hyperparameters for NHITS in experiment 1 and horizon 10

Hyperparameters	Options
n_pool_kernel_size	(2, 2, 2)
n_freq_downsample	(1, 1, 1)
learning_rate	0.0005
scaler_type	robust
max_steps	1400.0
batch_size	128
windows_batch_size	256

Table 20: Hyperparameters for NHITS in experiment 1 and horizon 10

Hyperparameters	Options
n_pool_kernel_size	(2, 2, 1)
n_freq_downsample	(60, 8, 1)
learning_rate	0.001
scaler_type	standard
max_steps	1400.0
batch_size	32
windows_batch_size	512

Table 21: Hyperparameters for TFT in experiment 1 and horizon 10

Hyperparameters	Options
hidden_size	256
n_head	8
learning_rate	0.0005
scaler_type	standard
max_steps	2000
batch_size	128
windows_batch_size	1024

Table 22: Hyperparameters for TFT in experiment 1 and horizon 10

Hyperparameters	Options
hidden_size	256
n_head	8
learning_rate	5e-05
scaler_type	standard
max_steps	2000
batch_size	32
windows_batch_size	256

Table 23: Hyperparameters for TiDE in experiment 1 and horizon 10

Hyperparameters	Options
hidden_size	256
decoder_output_dim	16
temporal_decoder_dim	128
num_encoder_layers	2
num_decoder_layers	3
temporal_width	16
dropout	0.3
layernorm	False
learning_rate	0.0005
scaler_type	robust
max_steps	1300.0
batch_size	32
windows_batch_size	1024

Table 24: Hyperparameters for TiDE in experiment 1 and horizon 10

Hyperparameters	Options
hidden_size	1024
decoder_output_dim	32
temporal_decoder_dim	128
num_encoder_layers	3
num_decoder_layers	3
temporal_width	4
dropout	0.3
layernorm	False
learning_rate	5e-05
scaler_type	standard
max_steps	1000.0
batch_size	32
windows_batch_size	512

Table 25: Hyperparameters for BiTCN in experiment 1 and horizon 20

Hyperparameters	Options
hidden_size	16
dropout	0.004944255444348664
learning_rate	0.01
scaler_type	standard
max_steps	2000
batch_size	64
windows_batch_size	128

Table 26: Hyperparameters for BiTCN in experiment 1 and horizon 20

Hyperparameters	Options
hidden_size	32
dropout	0.09502678547677132
learning_rate	0.001
scaler_type	robust
max_steps	1000
batch_size	64
windows_batch_size	256

Table 27: Hyperparameters for NHITS in experiment 1 and horizon 20

Hyperparameters	Options
n_pool_kernel_size	(8, 4, 1)
n_freq_downsample	(168, 24, 1)
learning_rate	0.005
scaler_type	standard
max_steps	1400.0
batch_size	64
windows_batch_size	512

Table 28: Hyperparameters for NHITS in experiment 1 and horizon 20

Hyperparameters	Options
n_pool_kernel_size	(16, 8, 1)
n_freq_downsample	(168, 24, 1)
learning_rate	0.001
scaler_type	standard
max_steps	900.0
batch_size	64
windows_batch_size	1024

Table 29: Hyperparameters for TFT in experiment 1 and horizon 20

Hyperparameters	Options
hidden_size	256
n_head	8
learning_rate	0.0001
scaler_type	standard
max_steps	2000
batch_size	128
windows_batch_size	256

Table 30: Hyperparameters for TFT in experiment 1 and horizon 20

Hyperparameters	Options
hidden_size	64
n_head	8
learning_rate	0.0005
scaler_type	standard
max_steps	2000
batch_size	64
windows_batch_size	512

Table 31: Hyperparameters for TiDE in experiment 1 and horizon 20

Hyperparameters	Options
hidden_size	512
decoder_output_dim	32
temporal_decoder_dim	64
num_encoder_layers	1
num_decoder_layers	2
temporal_width	16
dropout	0.2
layernorm	False
learning_rate	0.0001
scaler_type	standard
max_steps	1500.0
batch_size	64
windows_batch_size	1024

Table 32: Hyperparameters for TiDE in experiment 1 and horizon 20

Hyperparameters	Options
hidden_size	256
decoder_output_dim	8
temporal_decoder_dim	128
num_encoder_layers	1
num_decoder_layers	1
temporal_width	16
dropout	0.3
layernorm	True
learning_rate	0.01
scaler_type	robust
max_steps	1400.0
batch_size	32
windows_batch_size	1024

3 EXPERIMENT 2

Table 33: Hyperparameters for BiTCN in experiment 2 and horizon 1

Hyperparameters	Options
hidden_size	16
dropout	0.1982596820620405
learning_rate	0.005
scaler_type	robust
max_steps	2000
batch_size	64
windows_batch_size	128

Table 34: Hyperparameters for BiTCN in experiment 2 and horizon 1

Hyperparameters	Options
hidden_size	32
dropout	0.16663122629381397
learning_rate	0.001
scaler_type	robust
max_steps	500
batch_size	32
windows_batch_size	512

Table 35: Hyperparameters for NHITS in experiment 2 and horizon 1

Hyperparameters	Options
n_pool_kernel_size	(2, 2, 1)
n_freq_downsample	(24, 12, 1)
learning_rate	0.0005
scaler_type	robust
max_steps	900.0
batch_size	128
windows_batch_size	1024

Table 36: Hyperparameters for NHITS in experiment 2 and horizon 1

Hyperparameters	Options
n_pool_kernel_size	(1, 1, 1)
n_freq_downsample	(60, 8, 1)
learning_rate	0.001
scaler_type	standard
max_steps	1500.0
batch_size	128
windows_batch_size	512

Table 37: Hyperparameters for TFT in experiment 2 and horizon 1

Hyperparameters	Options
hidden_size	256
n_head	8
learning_rate	5e-05
scaler_type	standard
max_steps	1000
batch_size	64
windows_batch_size	1024

Table 38: Hyperparameters for TFT in experiment 2 and horizon 1

Hyperparameters	Options
hidden_size	256
n_head	4
learning_rate	0.0005
scaler_type	standard
max_steps	1000
batch_size	128
windows_batch_size	1024

Table 39: Hyperparameters for TiDE in experiment 2 and horizon 1

Hyperparameters	Options
hidden_size	1024
decoder_output_dim	32
temporal_decoder_dim	64
num_encoder_layers	1
num_decoder_layers	2
temporal_width	16
dropout	0.5
layernorm	False
learning_rate	0.0001
scaler_type	robust
max_steps	600.0
batch_size	64
windows_batch_size	1024

Table 40: Hyperparameters for TiDE in experiment 2 and horizon 1

Hyperparameters	Options
hidden_size	512
decoder_output_dim	8
temporal_decoder_dim	64
num_encoder_layers	1
num_decoder_layers	1
temporal_width	4
dropout	0.0
layernorm	False
learning_rate	0.0001
scaler_type	standard
max_steps	1400.0
batch_size	64
windows_batch_size	512

Table 41: Hyperparameters for BiTCN in experiment 2 and horizon 5

Hyperparameters	Options
hidden_size	16
dropout	0.0002031844118398924
learning_rate	0.005
scaler_type	standard
max_steps	1000
batch_size	32
windows_batch_size	512

Table 42: Hyperparameters for BiTCN in experiment 2 and horizon 5

Hyperparameters	Options
hidden_size	32
dropout	0.07229450701828932
learning_rate	0.001
scaler_type	standard
max_steps	1000
batch_size	32
windows_batch_size	1024

Table 43: Hyperparameters for NHITS in experiment 2 and horizon 5

Hyperparameters	Options
n_pool_kernel_size	(16, 8, 1)
n_freq_downsample	(180, 60, 1)
learning_rate	0.001
scaler_type	robust
max_steps	1300.0
batch_size	64
windows_batch_size	1024

Table 44: Hyperparameters for NHITS in experiment 2 and horizon 5

Hyperparameters	Options
n_pool_kernel_size	(2, 2, 1)
n_freq_downsample	(1, 1, 1)
learning_rate	0.0005
scaler_type	standard
max_steps	700.0
batch_size	32
windows_batch_size	256

Table 45: Hyperparameters for TFT in experiment 2 and horizon 5

Hyperparameters	Options
hidden_size	64
n_head	4
learning_rate	0.005
scaler_type	robust
max_steps	2000
batch_size	128
windows_batch_size	1024

Table 46: Hyperparameters for TFT in experiment 2 and horizon 5

Hyperparameters	Options
hidden_size	128
n_head	4
learning_rate	0.0005
scaler_type	robust
max_steps	2000
batch_size	128
windows_batch_size	1024

Table 47: Hyperparameters for TiDE in experiment 2 and horizon 5

Hyperparameters	Options
hidden_size	512
decoder_output_dim	32
temporal_decoder_dim	32
num_encoder_layers	1
num_decoder_layers	3
temporal_width	4
dropout	0.1
layernorm	False
learning_rate	0.0005
scaler_type	standard
max_steps	1500.0
batch_size	128
windows_batch_size	1024

Table 48: Hyperparameters for TiDE in experiment 2 and horizon 5

Hyperparameters	Options
hidden_size	1024
decoder_output_dim	16
temporal_decoder_dim	32
num_encoder_layers	1
num_decoder_layers	2
temporal_width	8
dropout	0.2
layernorm	False
learning_rate	0.0005
scaler_type	standard
max_steps	1500.0
batch_size	128
windows_batch_size	1024

Table 49: Hyperparameters for BiTCN in experiment 2 and horizon 10

Hyperparameters	Options
hidden_size	32
dropout	0.004140835965901486
learning_rate	0.005
scaler_type	standard
max_steps	500
batch_size	128
windows_batch_size	128

Table 50: Hyperparameters for BiTCN in experiment 2 and horizon 10

Hyperparameters	Options
hidden_size	16
dropout	0.0021307631125278004
learning_rate	0.005
scaler_type	robust
max_steps	500
batch_size	128
windows_batch_size	512

Table 51: Hyperparameters for NHITS in experiment 2 and horizon 10

Hyperparameters	Options
n_pool_kernel_size	(8, 4, 1)
n_freq_downsample	(24, 12, 1)
learning_rate	0.001
scaler_type	standard
max_steps	1100.0
batch_size	128
windows_batch_size	1024

Table 52: Hyperparameters for NHITS in experiment 2 and horizon 10

Hyperparameters	Options
n_pool_kernel_size	(16, 8, 1)
n_freq_downsample	(180, 60, 1)
learning_rate	0.0005
scaler_type	standard
max_steps	1500.0
batch_size	32
windows_batch_size	1024

Table 53: Hyperparameters for TFT in experiment 2 and horizon 10

Hyperparameters	Options
hidden_size	128
n_head	8
learning_rate	0.001
scaler_type	robust
max_steps	2000
batch_size	64
windows_batch_size	1024

Table 54: Hyperparameters for TFT in experiment 2 and horizon 10

Hyperparameters	Options
hidden_size	128
n_head	8
learning_rate	0.005
scaler_type	standard
max_steps	2000
batch_size	32
windows_batch_size	512

Table 55: Hyperparameters for TiDE in experiment 2 and horizon 10

Hyperparameters	Options
hidden_size	256
decoder_output_dim	16
temporal_decoder_dim	128
num_encoder_layers	3
num_decoder_layers	3
temporal_width	8
dropout	0.3
layernorm	False
learning_rate	0.0005
scaler_type	standard
max_steps	1200.0
batch_size	32
windows_batch_size	1024

Table 56: Hyperparameters for TiDE in experiment 2 and horizon 10

Hyperparameters	Options
hidden_size	1024
decoder_output_dim	32
temporal_decoder_dim	64
num_encoder_layers	1
num_decoder_layers	3
temporal_width	8
dropout	0.2
layernorm	False
learning_rate	0.0005
scaler_type	standard
max_steps	1500.0
batch_size	64
windows_batch_size	1024

Table 57: Hyperparameters for BiTCN in experiment 2 and horizon 20

Hyperparameters	Options
hidden_size	32
dropout	0.061580554892364345
learning_rate	0.005
scaler_type	standard
max_steps	2000
batch_size	128
windows_batch_size	256

Table 58: Hyperparameters for BiTCN in experiment 2 and horizon 20

Hyperparameters	Options
hidden_size	32
dropout	0.01159221611565845
learning_rate	0.001
scaler_type	robust
max_steps	2000
batch_size	128
windows_batch_size	512

Table 59: Hyperparameters for NHITS in experiment 2 and horizon 20

Hyperparameters	Options
n_pool_kernel_size	(16, 8, 1)
n_freq_downsample	(60, 8, 1)
learning_rate	0.0005
scaler_type	standard
max_steps	800.0
batch_size	64
windows_batch_size	256

Table 60: Hyperparameters for NHITS in experiment 2 and horizon 20

Hyperparameters	Options
n_pool_kernel_size	(2, 2, 2)
n_freq_downsample	(168, 24, 1)
learning_rate	0.0005
scaler_type	standard
max_steps	1500.0
batch_size	32
windows_batch_size	512

Table 61: Hyperparameters for TFT in experiment 2 and horizon 20

Hyperparameters	Options
hidden_size	64
n_head	8
learning_rate	0.005
scaler_type	standard
max_steps	1000
batch_size	128
windows_batch_size	1024

Table 62: Hyperparameters for TFT in experiment 2 and horizon 20

Hyperparameters	Options
hidden_size	256
n_head	8
learning_rate	0.01
scaler_type	standard
max_steps	2000
batch_size	128
windows_batch_size	1024

Table 63: Hyperparameters for TiDE in experiment 2 and horizon 20

Hyperparameters	Options
hidden_size	1024
decoder_output_dim	16
temporal_decoder_dim	64
num_encoder_layers	1
num_decoder_layers	1
temporal_width	4
dropout	0.5
layernorm	False
learning_rate	0.001
scaler_type	robust
max_steps	1100.0
batch_size	64
windows_batch_size	1024

Table 64: Hyperparameters for TiDE in experiment 2 and horizon 20

Hyperparameters	Options
hidden_size	1024
decoder_output_dim	32
temporal_decoder_dim	32
num_encoder_layers	2
num_decoder_layers	1
temporal_width	16
dropout	0.0
layernorm	False
learning_rate	0.0005
scaler_type	standard
max_steps	1100.0
batch_size	128
windows_batch_size	128

4 FIRM INDICATORS

Table 65: Hyperparameters for BiTCN with firm indicators only and horizon 1

Hyperparameters	Options
hidden_size	16
dropout	0.2862123404202475
learning_rate	0.001
scaler_type	robust
max_steps	2000
batch_size	128
windows_batch_size	1024

Table 66: Hyperparameters for NHITS with firm indicators only and horizon 1

Hyperparameters	Options
n_pool_kernel_size	(1, 1, 1)
n_freq_downsample	(40, 20, 1)
learning_rate	0.0005
scaler_type	standard
max_steps	1500.0
batch_size	128
windows_batch_size	512

Table 67: Hyperparameters for TFT with firm indicators only and horizon 1

Hyperparameters	Options
hidden_size	128
n_head	8
learning_rate	0.005
scaler_type	standard
max_steps	2000
batch_size	128
windows_batch_size	1024

Table 68: Hyperparameters for TiDE with firm indicators only and horizon 1

Hyperparameters	Options
hidden_size	512
decoder_output_dim	32
temporal_decoder_dim	32
num_encoder_layers	1
num_decoder_layers	1
temporal_width	16
dropout	0.1
layernorm	False
learning_rate	0.001
scaler_type	standard
max_steps	700.0
batch_size	128
windows_batch_size	1024

Table 69: Hyperparameters for BiTCN with firm indicators only and horizon 5

Hyperparameters	Options
hidden_size	16
dropout	0.052394792456435774
learning_rate	0.01
scaler_type	standard
max_steps	500
batch_size	64
windows_batch_size	1024

Table 70: Hyperparameters for NHITS with firm indicators only and horizon 5

Hyperparameters	Options
n_pool_kernel_size	(16, 8, 1)
n_freq_downsample	(180, 60, 1)
learning_rate	0.0005
scaler_type	standard
max_steps	1500.0
batch_size	128
windows_batch_size	512

Table 71: Hyperparameters for TFT with firm indicators only and horizon 5

Hyperparameters	Options
hidden_size	64
n_head	8
learning_rate	0.01
scaler_type	standard
max_steps	1000
batch_size	64
windows_batch_size	1024

Table 72: Hyperparameters for TiDE with firm indicators only and horizon 5

Hyperparameters	Options
hidden_size	512
decoder_output_dim	16
temporal_decoder_dim	32
num_encoder_layers	2
num_decoder_layers	1
temporal_width	4
dropout	0.5
layernorm	False
learning_rate	0.0005
scaler_type	standard
max_steps	1200.0
batch_size	128
windows_batch_size	1024

Table 73: Hyperparameters for BiTCN with firm indicators only and horizon 10

Hyperparameters	Options
hidden_size	32
dropout	0.01253507603673587
learning_rate	0.01
scaler_type	standard
max_steps	500
batch_size	256
windows_batch_size	512

Table 74: Hyperparameters for NHITS with firm indicators only and horizon 10

Hyperparameters	Options
n_pool_kernel_size	(2, 2, 1)
n_freq_downsample	(40, 20, 1)
learning_rate	0.001
scaler_type	standard
max_steps	1100.0
batch_size	128
windows_batch_size	512

Table 75: Hyperparameters for TFT with firm indicators only and horizon 10

Hyperparameters	Options
hidden_size	64
n_head	8
learning_rate	0.001
scaler_type	standard
max_steps	2000
batch_size	128
windows_batch_size	512

Table 76: Hyperparameters for TiDE with firm indicators only and horizon 10

Hyperparameters	Options
hidden_size	256
decoder_output_dim	32
temporal_decoder_dim	32
num_encoder_layers	2
num_decoder_layers	3
temporal_width	8
dropout	0.1
layernorm	False
learning_rate	0.005
scaler_type	standard
max_steps	900.0
batch_size	128
windows_batch_size	1024

Table 77: Hyperparameters for BiTCN with firm indicators only and horizon 20

Hyperparameters	Options
hidden_size	16
dropout	0.20918739692977562
learning_rate	0.01
scaler_type	standard
max_steps	500
batch_size	128
windows_batch_size	1024

Table 78: Hyperparameters for NHITS with firm indicators only and horizon 20

Hyperparameters	Options
n_pool_kernel_size	(4, 4, 4)
n_freq_downsample	(180, 60, 1)
learning_rate	0.01
scaler_type	standard
max_steps	1200.0
batch_size	64
windows_batch_size	256

Table 79: Hyperparameters for TFT with firm indicators only and horizon 20

Hyperparameters	Options
hidden_size	256
n_head	4
learning_rate	0.0005
scaler_type	standard
max_steps	2000
batch_size	128
windows_batch_size	1024

Table 80: Hyperparameters for TiDE with firm indicators only and horizon 20

Hyperparameters	Options
hidden_size	512
decoder_output_dim	16
temporal_decoder_dim	128
num_encoder_layers	1
num_decoder_layers	1
temporal_width	4
dropout	0.5
layernorm	True
learning_rate	0.01
scaler_type	standard
max_steps	1100.0
batch_size	32
windows_batch_size	256

5 TECHNICAL INDICATORS

Table 81: Hyperparameters for BiTCN with technical indicators only and horizon 1

Hyperparameters	Options
hidden_size	16
dropout	0.4954990474438764
learning_rate	0.005
scaler_type	standard
max_steps	500
batch_size	64
windows_batch_size	128

Table 82: Hyperparameters for NHITS with technical indicators only and horizon 1

Hyperparameters	Options
n_pool_kernel_size	(2, 2, 1)
n_freq_downsample	(24, 12, 1)
learning_rate	0.001
scaler_type	standard
max_steps	1400.0
batch_size	32
windows_batch_size	1024

Table 83: Hyperparameters for TFT with technical indicators only and horizon 1

Hyperparameters	Options
hidden_size	256
n_head	8
learning_rate	0.0001
scaler_type	standard
max_steps	2000
batch_size	64
windows_batch_size	1024

Table 84: Hyperparameters for TiDE with technical indicators only and horizon 1

Hyperparameters	Options
hidden_size	1024
decoder_output_dim	16
temporal_decoder_dim	128
num_encoder_layers	2
num_decoder_layers	3
temporal_width	8
dropout	0.1
layernorm	False
learning_rate	0.0005
scaler_type	standard
max_steps	1300.0
batch_size	64
windows_batch_size	1024

Table 85: Hyperparameters for BiTCN with technical indicators only and horizon 5

Hyperparameters	Options
hidden_size	32
dropout	0.1602496393228111
learning_rate	0.005
scaler_type	standard
max_steps	2000
batch_size	128
windows_batch_size	128

Table 86: Hyperparameters for NHITS with technical indicators only and horizon 5

Hyperparameters	Options
n_pool_kernel_size	(2, 2, 1)
n_freq_downsample	(40, 20, 1)
learning_rate	0.0005
scaler_type	robust
max_steps	1000.0
batch_size	128
windows_batch_size	1024

Table 87: Hyperparameters for TFT with technical indicators only and horizon 5

Hyperparameters	Options
hidden_size	256
n_head	8
learning_rate	0.001
scaler_type	standard
max_steps	1000
batch_size	128
windows_batch_size	1024

Table 88: Hyperparameters for TiDE with technical indicators only and horizon 5

Hyperparameters	Options
hidden_size	256
decoder_output_dim	8
temporal_decoder_dim	64
num_encoder_layers	3
num_decoder_layers	3
temporal_width	4
dropout	0.1
layernorm	False
learning_rate	0.0001
scaler_type	standard
max_steps	1400.0
batch_size	128
windows_batch_size	512

Table 89: Hyperparameters for BiTCN with technical indicators only and horizon 10

Hyperparameters	Options
hidden_size	16
dropout	0.04571396334593256
learning_rate	0.005
scaler_type	robust
max_steps	1000
batch_size	64
windows_batch_size	256

Table 90: Hyperparameters for NHITS with technical indicators only and horizon 10

Hyperparameters	Options
n_pool_kernel_size	(4, 4, 4)
n_freq_downsample	(40, 20, 1)
learning_rate	0.005
scaler_type	standard
max_steps	1400.0
batch_size	128
windows_batch_size	1024

Table 91: Hyperparameters for TFT with technical indicators only and horizon 10

Hyperparameters	Options
hidden_size	128
n_head	8
learning_rate	0.0005
scaler_type	robust
max_steps	2000
batch_size	128
windows_batch_size	512

Table 92: Hyperparameters for TiDE with technical indicators only and horizon 10

Hyperparameters	Options
hidden_size	1024
decoder_output_dim	32
temporal_decoder_dim	64
num_encoder_layers	2
num_decoder_layers	2
temporal_width	8
dropout	0.5
layernorm	False
learning_rate	0.001
scaler_type	robust
max_steps	1100.0
batch_size	128
windows_batch_size	512

Table 93: Hyperparameters for BiTCN with technical indicators only and horizon 20

Hyperparameters	Options
hidden_size	32
dropout	0.027992879831349834
learning_rate	0.0005
scaler_type	standard
max_steps	2000
batch_size	128
windows_batch_size	512

Table 94: Hyperparameters for NHITS with technical indicators only and horizon 20

Hyperparameters	Options
n_pool_kernel_size	(2, 2, 2)
n_freq_downsample	(180, 60, 1)
learning_rate	0.001
scaler_type	robust
max_steps	1400.0
batch_size	64
windows_batch_size	1024

Table 95: Hyperparameters for TFT with technical indicators only and horizon 20

Hyperparameters	Options
hidden_size	128
n_head	4
learning_rate	0.005
scaler_type	robust
max_steps	2000
batch_size	256
windows_batch_size	512

Table 96: Hyperparameters for TiDE with technical indicators only and horizon 20

Hyperparameters	Options
hidden_size	512
decoder_output_dim	8
temporal_decoder_dim	32
num_encoder_layers	1
num_decoder_layers	3
temporal_width	4
dropout	0.3
layernorm	False
learning_rate	0.0001
scaler_type	standard
max_steps	700.0
batch_size	128
windows_batch_size	512