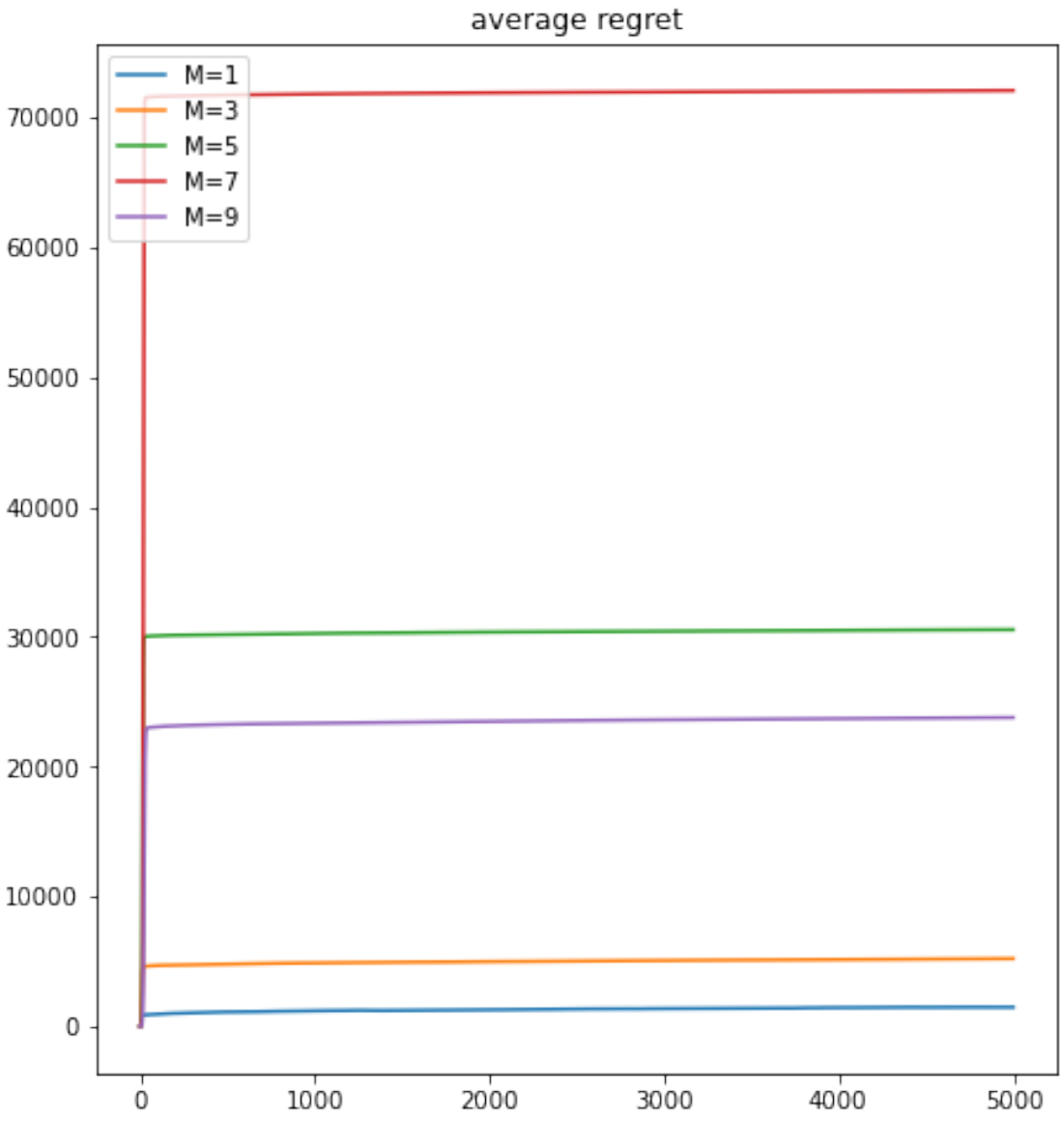
[31]:
```
import matplotlib.pyplot as plt
#import seaborn as sb
plt.figure(1,figsize=[16,8])
plt.subplot(121)
plt.plot(horizon,finalreg[0,:])
plt.plot(horizon,finalreg[1,:])
plt.plot(horizon,finalreg[2,:])
plt.plot(horizon,finalreg[3,:])
plt.plot(horizon,finalreg[4,:])

plt.legend(["M=1", "M=3", "M=5", "M=7", "M=9"])
plt.title('average regret')
plt.show()
```



[38]:
```
print('A_hat',theta_hat[:,0:3])
print('B_hat',theta_hat[:,3:6])
```

```
A_hat [[0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]]
B_hat [[0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]
 [0. 0. 0.]]
```

[39]:
```
print('A',theta_star[:,0:3])
```

```
A [[1.05 0.05 0.05]
 [0.05 1.05 0.05]
 [0.05 0.05 1.05]
 [0.05 0.05 0.05]
 [0.05 0.05 0.05]
 [0.05 0.05 0.05]
 [0.05 0.05 0.05]
 [0.05 0.05 0.05]
 [0.05 0.05 0.05]
 [0.05 0.05 0.05]]
```

[40]:
```
print('B',theta_star[:,3:6])
```

```
B [[0.05 0.05 0.05]
 [0.05 0.05 0.05]
 [0.05 0.05 0.05]
 [1.05 0.05 0.05]
 [0.05 1.05 0.05]
 [0.05 0.05 1.05]
```

```
[0.05 0.05 0.05]
[0.05 0.05 0.05]
[0.05 0.05 0.05]
[0.05 0.05 0.05]]
```

[ ]: