```java
package player.playeragent;

import static org.junit.Assert.*;
import org.junit.Test;

import player.Util;

import edu.neu.ccs.demeterf.demfgen.lib.List;
import gen.Derivative;
import gen.Player;
import gen.PlayerID;
import gen.Type;

public class CreateAgentTest {

  @Test
  public void createDerivativeTest(){
    CreateAgent c = new CreateAgent();
    List<Type> existing = List.<Type>create();
    for(int i = 0; i < 100; i++){
      existing = existing.append(Util.freshType(existing));
    }
    for(int i = 0; i < 100; i++){
      Derivative d = c.createDerivative(new Player(new PlayerID(0),""),existing);
      assertFalse(existing.contains(d.type));
      assertTrue(d.price.val <= 1.0);
      assertTrue(d.price.val > Util.breakEvenValue(d.type) || d.price.val == 1.0);
    }
  }
}
```