CLAIMS

1. A method, comprising:

creating, using a platform, a fractionalized risk pool for a real estate property, the fractionalized risk pool comprising asset tokens and an occupancy token, the asset tokens and the occupancy token issued using blockchain, wherein the asset tokens are fungible and linked to the occupancy token, and wherein the occupancy token is non-fungible and comprises an updateable metadata field comprising a valuation of the real estate property and a highwater-mark value of the real estate property;

transmitting, by a first computing device of the first computing system, a first network function request to a decentralized network, the first network function request including first information comprising a first sale of a first portion of the asset tokens to a first asset token holder, wherein the first sale comprises a first blockchain based smart contract to a decentralized network, wherein the first portion of the asset tokens are associated with the highwater-mark value at a first state;

logging, by the platform, a decrease in the valuation in the updateable metadata field; and

transmitting, by a second computing device of the second computing system, a second network function request to the decentralized network, the second network function request including second information comprising a second sale of a second portion of the asset tokens to a second asset token holder, wherein the second sale comprises a second blockchain based smart contract to the decentralized network, wherein the second portion of the asset tokens are associated with the highwater-mark value at a second state based on the decrease in the valuation.

2. The method of claim 1, wherein the occupancy token confers rights to occupy the real estate property.

3. The method of claim 1, further comprising:

updating the highwater-mark value based on changes in the valuation of the real estate property.

4. The method of claim 1, wherein the asset tokens represent fractional ownership interests in the real estate property.

5. The method of claim 1, further comprising:

distributing payments to the first asset token holder and the second asset token holder using blockchain.

6. The method of claim 1, wherein the fractionalized risk pool further comprises HPI tokens representing home price appreciation rights.

7. The method of claim 6, further comprising:

unlocking a portion of the HPI tokens based on an increase in the valuation of the real estate property.

8. The method of claim 6, wherein the first blockchain based smart contract contains an agreement to assign appreciation to a fractionalized pool of the HPI tokens, and in exchange issues HPI tokens.

9. The method of claim 1, further comprising:

calculating a minimum retained equity for an occupant of the real estate property.

10. The method of claim 9, wherein minimum retained equity is determined based on risk of an occupant and global risk pool performance.

11. A system, comprising:

a platform configured to create a fractionalized risk pool for a real estate property, the fractionalized risk pool comprising asset tokens and an occupancy token, the asset tokens and the occupancy token issued using blockchain, wherein the asset tokens are fungible and linked to the occupancy token, and wherein the occupancy token is non-fungible and comprises an updateable metadata field comprising a valuation of the real estate property and a highwater-mark value of the real estate property;

a first computing device configured to transmit a first network function request to a decentralized network, the first network function request including first information comprising a first sale of a first portion of the asset tokens to a first asset token holder, wherein the first sale comprises a first blockchain based smart contract to a decentralized network, wherein the first portion of the asset tokens are associated with the highwater-mark value at a first state;
wherein the platform is further configured to log a decrease in the valuation in the updateable metadata field; and

a second computing device configured to transmit a second network function request to the decentralized network, the second network function request including second information comprising a second sale of a second portion of the asset tokens to a second asset token holder, wherein the second sale comprises a second blockchain based smart contract to the decentralized network, wherein the second portion of the asset tokens are associated with the highwater-mark value at a second state based on the decrease in the valuation.

12. The system of claim 11, wherein the occupancy token confers rights to occupy the real estate property.

13. The system of claim 11, wherein the platform is further configured to update the highwater-mark value based on changes in the valuation of the real estate property.

14. The system of claim 11, wherein the asset tokens represent fractional ownership interests in the real estate property.

15. The system of claim 11, wherein the platform is further configured to distribute payments to the first asset token holder and the second asset token holder using blockchain.

16. The system of claim 11, wherein the fractionalized risk pool further comprises HPI tokens representing home price appreciation rights.

17. The system of claim 16, wherein the platform is further configured to unlock a portion of the HPI tokens based on an increase in the valuation of the real estate property.

18. The system of claim 16, wherein the first blockchain based smart contract contains an agreement to assign appreciation to a fractionalized pool of the HPI tokens, and in exchange issues HPI tokens.

19. The system of claim 11, wherein the platform is further configured to calculate a minimum retained equity for an occupant of the real estate property.

20. The system of claim 19, wherein minimum retained equity is determined based on risk of an occupant and global risk pool performance.