

CLAIMS:

1. A method, comprising:

communicating, by a computing device, a first instrument between a seller and a buyer of a production share of first physical goods over a central service layer, wherein the central service layer is configured to facilitate a plurality of instruments of the production share, and wherein the first instrument is recorded in a data store with the plurality of instruments of the production share;

recording, by the computing device, a second instrument in the data store, wherein the second instrument represents second physical goods provided by a guarantor in communication with the central service layer;

associating, by the computing device, the second instrument recorded in the data store with the first instrument by an identifier over the central service layer to create a family relationship between the first instrument and the second instrument, wherein the family relationship establishes that an amount of the second physical goods of the second instrument covers an amount of the first physical goods of the production share of the first instrument;

translating, by the computing device, market information regarding the production share from the first instrument and the second instrument based on the family relationship and accessed from the data store using the identifier, wherein the market information regarding the production share is determined at least in part based on the existence of the family relationship between the first instrument and the second instrument and integrating the market information regarding the production share into adjusted market information; and

transmitting, by the computing device, the market information regarding the production share and the adjusted market information to devices connected over the central service layer.

2. The method of claim 1, wherein the first instrument specifies terms for the purchase of the first physical goods from a source by the buyer.

3. The method of claim 1, wherein a specific physical good is associated with a unique identifier that makes the specific physical good verifiable, and wherein the specific physical good is within the first physical goods and is referenced by the first instrument, or the specific physical good is within the second physical goods and referenced by the second instrument.

4. The method of claim 3, wherein the unique identifier is fixed on the specific physical good.

5. The method of claim 3, wherein the specific physical good is a precious metal injected with a physical pattern that serves as the unique identifier.

6. The method of claim 1, wherein the translating further comprises:

translating the market information regarding the production share from a third instrument accessed from the data store based on the identifier, wherein the third instrument is provided as a contingency purchase of the first physical goods of the production share and is included in the family relationship between the first instrument and the second instrument.

7. The method of claim 1, further comprising:

tracking market information of a specific physical good corresponding to the first physical goods or the second physical goods by logging, by the central service layer, a transaction of the specific physical good based on a unique identifier of the specific physical good that makes the specific physical good verifiable.

8. A system, comprising:

a memory; and

one or more processors, coupled to the memory, configured to perform operations comprising:

communicating a first instrument between a seller and a buyer of a production share of first physical goods over a central service layer, wherein the central service layer is configured to facilitate a plurality of instruments of the production share, and wherein the first instrument is recorded in a data store with the plurality of instruments of the production share;

recording a second instrument in the data store, wherein the second instrument represents second physical goods provided by a guarantor in communication with the central service layer;

associating the second instrument recorded in the data store with the first instrument by an identifier over the central service layer to create a family relationship between the first instrument and the second instrument, wherein the family relationship establishes that an amount of the second physical goods of the second instrument covers an amount of the first physical goods of the production share of the first instrument;

translating market information regarding the production share from the first instrument and the second instrument based on the family relationship and accessed from the data store using the identifier, wherein the market information regarding the production share is determined at least in part based on the existence of the family relationship between the first instrument and the second instrument, and integrating the market information regarding the production share into adjusted market information, and

transmitting the market information regarding the production share and the adjusted market information to devices connected over the central service layer.

9. The system of claim 8, wherein the first instrument specifies terms for the purchase of the first physical goods from a source by the buyer.

10. The system of claim 8, wherein the a specific physical good is associated with a unique identifier that makes the specific physical good verifiable, and wherein the specific physical good is within the first physical goods and is referenced by the first instrument, or the specific physical good is within the second physical goods and referenced by the second instrument.

11. The system of claim 10, wherein the unique identifier is fixed on the specific physical good.

12. The system of claim 10, wherein the specific physical good is a precious metal injected with a physical pattern that serves as the unique identifier.

13. The system of claim 8, wherein the translating further comprises:

translating the market information regarding the production share from a third instrument accessed from the data store based on the identifier, wherein the third instrument is provided as a contingency purchase of the first physical goods of the production share and is included in the family relationship between the first instrument and the second instrument.

14. The system of claim 8, the operations further comprising:

tracking market information of a specific physical good corresponding to the first physical goods or the second physical goods by logging, by the central service layer, a transaction of the specific physical good based on a unique identifier of the specific physical good that makes the specific physical good verifiable.

15. A computer-readable storage device having instructions stored thereon, execution of which, by at least one computing device, causes the at least one computing device to perform operations comprising:

communicating a first instrument between a seller and a buyer of a production share of first physical goods over a central service layer, wherein the central service layer is configured to facilitate a plurality of instruments of the production share, and wherein the first instrument is recorded in a data store with the plurality of instruments of the production share;

recording a second instrument in the data store, wherein the second instrument represents second physical goods provided by a guarantor in communication with the central service layer;

associating the second instrument recorded in the data store with the first instrument by an identifier over the central service layer to create a family relationship between the first instrument and the second instrument, wherein the family relationship establishes that an amount of the second physical goods of the second instrument covers an amount of the first physical goods of the production share of the first instrument;

translating market information regarding the production share from the first instrument and the second instrument based on the family relationship and accessed from the data store using the identifier, wherein the market information regarding the production share is determined at least in part based on the existence of the family relationship between the first instrument and the second instrument, and integrating the market information regarding the production share into adjusted market information; and

transmitting the market information regarding the production share and the adjusted market information to devices connected over the central service layer.

16. The computer-readable storage device of claim 15, wherein the first instrument specifies terms for the purchase of the first physical goods from a source by the buyer.

17. The computer-readable storage device of claim 15, wherein a specific physical good is associated with a unique identifier that makes the specific physical good verifiable, and wherein the specific physical good is within the first physical goods and is referenced by the first instrument, or the specific physical good is within the second physical goods and referenced by the second instrument.

18. The computer-readable storage device of claim 17, wherein the specific physical good is a precious metal injected with a physical pattern that serves as the unique identifier.

19. The computer-readable storage device of claim 15, wherein the translating comprises:

translating the market information regarding the production share from a third instrument accessed from the data store based on the identifier, wherein the third instrument is provided as a contingency purchase of the first physical goods of the production share and is included in the family relationship between the first instrument and the second instrument.

20. The computer-readable storage device of claim 15, the operations further comprising:

tracking market information of a specific physical good corresponding to the first physical goods or the second physical goods by logging, by the central service layer, a transaction of the specific physical good based on a unique identifier of the specific physical good that makes the specific physical good verifiable.