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To: Bill Botzow

Cc: Davis, Ian; Maria Royle; Liz Raddock; Rickard, Jill; Brown, Christine; Bigglestone, Sandy

Subject: reinsurance diagram

Mr. Chairman,

Per Rep. Kimbell's request, attached is a block diagram of a typical reinsurance program. Sorry for the tiny print!. In insurance jargon, this is called a reinsurance placement or completed "slip". In the not too distant past, a reinsurance broker or intermediary would literally go from reinsurer to reinsurer getting blocks of reinsurance on a slip of paper.

The diagram illustrates the amounts each reinsurance company would have to pay in the event of a claim. In this example, the reinsurance covers up to \$300 million above the deductible, which we can assume to be \$5 million for our purposes.

Here's how it works: the insurance company (captive or traditional) issues a \$300 million property policy to the insured company, with a \$5 million deductible.

If the parent incurs a loss of \$105 million, draw a line across the diagram at the \$100 million scale on the left of the diagram.

- The insured pays the \$5 million deductible the white block at the bottom of the diagram
- Hannover, the leftmost yellow block on the diagram, breathes a sigh of relief, because they
 don't start paying until \$100 million in excess of the deductible
- Ironshore, the purple block on the left edge of the diagram, who is responsible for 6% of the first \$200 million of loss, pays \$6 million (6% of \$100 million)
- AXIS UK, (the 2nd and 3rd yellow blocks from left to right) pays \$1.985 million (7.5% of the layer from \$75 million to \$100 million) but pays nothing of the higher lock they've assumed
- The various Lloyds' syndicates (in green) pay bits and pieces from bottom to top, up to the \$100 million line
- and so on

You can see the appetites for the risk that each reinsurer is will to take by the size and orientation of the blocks. In very broad terms, blocks that are vertically oriented are assuming more severity risk, those that are horizontally oriented are assuming more frequency risk. Block that are higher up are further away from the first dollar of loss – less likely to get hit at all – and therefore cost less than similarly sized blocks at the bottom.

I'd be happy to stop by anytime if the committee would care to go through this in greater detail. This is how the insurance marketplace distributes risk around the world. No one insurance company want to take a \$300 million hit for a single risk, so when a policy is issued by an insurer – captive or commercial – the reinsurance market is there to spread the risk.

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