



Shakespeare wasn't an actuary, but his picture of risk mismanagement in 16th-century Venice is right on the money.

# How Actuarial

BY DANIEL D. SKWIRE

**M**ost of William Shakespeare's plays may be clearly classified as comedies, histories, or tragedies. *The Merchant of Venice*, however, poses more of a challenge. Though essentially a romantic comedy about the wooing of Portia, it also tells the dark story of Shylock and Antonio, a tale with tragic elements that has fascinated generations of readers and has made the play more popular today than it was in its own time. In addition, the play is unusually specific and realistic in its portrayal of Venetian commerce and justice in the 1500s.

For most modern directors, the Jewish moneylender Shylock is the focus of the play. Is he a cruel villain, a gross ethnic stereotype, or a sympathetic victim of the prejudices of his time? Probably a little of each, though modern productions have tended toward the sympathetic—even as they give him free rein to sharpen his knife while demanding his pound of flesh. A recent film with Al Pacino provides a good example of the modern view of Shylock.

For those of us who toil in the financial world, however, the play is compelling for other reasons. The overriding theme of the play—through all of its plots and subplots—is risk. Merchants send precious cargo worth fortunes to sea. Noblemen borrow money they can't repay. Suitors play games of chance to win a wife. If *The Merchant of Venice* defies categorization as comedy, history, or tragedy, perhaps it's better considered as a financial drama.

## A Bloodless Pound of Flesh

The play opens when the spendthrift nobleman Bassanio approaches his friend Antonio, a prosperous merchant, and asks for money to help him woo the beautiful and wealthy Portia. Antonio has nothing to offer him since his entire fortune is at sea, but he encourages Bassanio to borrow money on Antonio's credit. Bassanio borrows 3,000 ducats from Shylock for a term of three months. Shylock lends the money without charging interest, but

with the stipulation that he is entitled to a pound of Antonio's flesh if the money is not repaid on time. Antonio is confident that his ships will return safely and bring him the money to pay Shylock.

Bassanio successfully wins Portia's hand where other suitors have failed. He guesses that a lead box, rather than an ornate gold or silver one, contains her portrait. ("Who chooseth me must give and hazard all he hath," reads an inscription on the lead box.) Meanwhile, however, all of Antonio's ships are lost at sea, and he can't repay Shylock when the money is due. Shylock demands his pound of flesh as a forfeit.

A trial ensues before the Duke of Venice. Shylock argues that Venetian law entitles him to his forfeit under the terms of his notarized contract, and he begins to sharpen his knife to cut out Antonio's heart. Unable to counter the argument, the Duke invites a learned doctor of laws to offer guidance on the case.

In this lawyer's place, however, appears Portia, dressed as a man, who eloquently but unsuccessfully encourages Shylock to be merciful. ("The quality of mercy is not strained...") She then states that Shylock is entitled to claim his pound of flesh but adds that under Venetian law he will be subject to death if he spills a single drop of Antonio's blood. Shylock reluctantly says he will accept the money instead, but Portia refuses this as well, ultimately requiring Shylock to pay half of his own fortune to Antonio as well as to convert to Christianity.

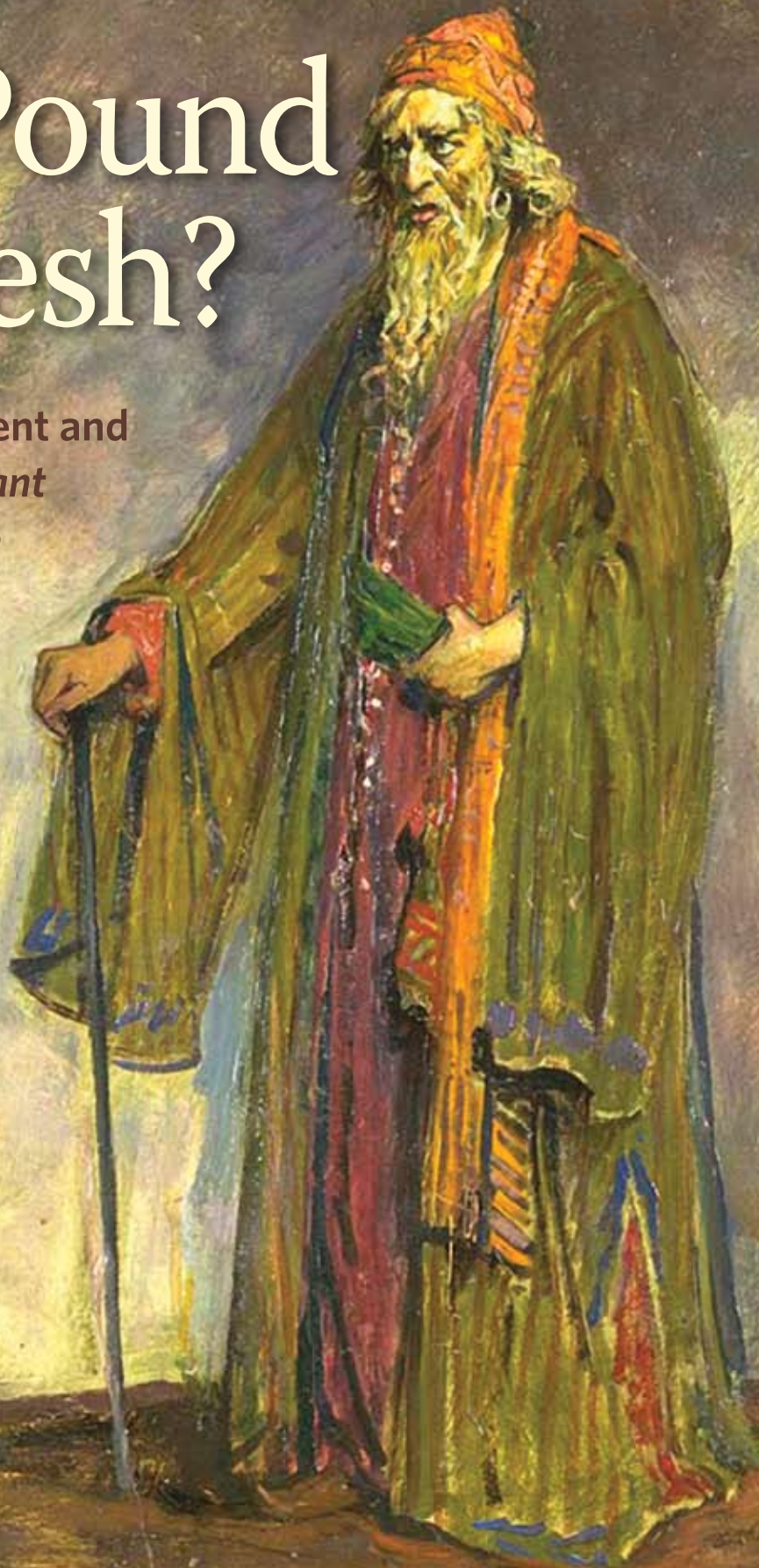
## Risk Mismanagement

*The Merchant of Venice* is a case study in how and how not to manage risk. In the play's first scene, Antonio's friend Salerio comments on the anxiety of having so much wealth invested in cargo at sea and how he fears that his ship, the *Andrew*, will run aground and be destroyed:

I should not see the sandy hourglass run  
But I should think of shallows and of flats  
And see my wealthy *Andrew* docked in sand,  
Vailing her high-top lower than her ribs  
To kiss her burial. (I.i.26-30)  
Antonio claims he has no such worries, due to

# is a Pound of Flesh?

**Risk Management and  
*The Merchant  
of Venice***



## The Merchant of Venice would have been a very different story if some clever broker had persuaded Antonio to insure his cargo.



the number of ships he has at sea:

My ventures are not in one bottom trusted,  
Nor to one place; nor is my whole estate  
Upon the fortune of this present year. (I.i.42-44)

Peter Bernstein, in his book *Against the Gods: The Remarkable Story of Risk*, points out that Antonio is following a legitimate risk management strategy of diversification. True, perhaps, yet Antonio is done in by excessive optimism, and he appears to consider only favorable outcomes and never the potential downside. Discouraged by Bassanio from accepting Shylock's terms, Antonio reassures him:

Within these two months—that's a month before  
This bond expires—I do expect return  
Of thrice three times the value of this bond. (I.iii.156-158)

Shylock, of course, knows better. As he considers the loan, he reflects on the likelihood of loss. "But ships are but boards, sailors but men; there be land rats and water rats, water thieves and land thieves—I mean pirates—and then there is the peril of waters, winds, and rocks." Antonio bears significant risk before the loan is made, yet seems unaware of it. Shylock only assumes risk through making the loan, and he engages in prudent underwriting by weighing the risk against the potential rewards.

Usury, or the lending of money for interest, was prohibited (or at least strongly discouraged) for Christians at the time the play takes place. As a Jew, however, Shylock is able to charge interest on his loans; his business, while loathed, is tolerated as a necessity in a mercantile economy. (W. H. Auden's essay "Brothers and Others" contains an excellent discussion of usury in this period.)

Antonio and the other Venetian merchants avail themselves of Shylock's services while simultaneously insulting his religion, calling him a dog, and spitting on him in the streets of Venice. In addition, Antonio makes a habit of subverting Shylock's business by offering free loans to Shylock's customers when he finds himself with sufficient funds. "He hath . . . hindered me half a million," says Shylock of Antonio, explaining his hatred for the merchant.

### Shylock the Friendly Underwriter

It's clear when he agrees to the terms of the loan that Antonio understands neither the amount of risk Shylock is assuming nor the value that Shylock places on the 3,000 ducats (and, indeed, on the pound of flesh). Uncertain why interest would be required

at all, Antonio and Bassanio are thrilled at what they perceive to be a free loan, though initially concerned about the nature of the forfeit. Shylock says the pound of flesh is just "a merry sport" and downplays its significance to Bassanio in order to close the deal:

If he should break his day, what should I gain  
By the exaction of the forfeiture?  
A pound of man's flesh taken from a man  
Is not so estimable, profitable neither,  
As flesh of muttons, beef, or goats. (I.iii.162-166)

Too willing to accept this statement at face value, Antonio and Bassanio fail to see that the forfeit is, in fact, enormously valuable to Shylock because it will rid him of a personal enemy as well as a business competitor. More astute borrowers, even if they didn't suspect Shylock's violent intention, would have realized that such an experienced and successful moneylender would never have taken on so much risk without the prospect of a great reward.

Given the play's historical realism in other areas, it's somewhat surprising that Antonio fails to take advantage of other means to protect himself from Shylock. A little marine insurance, for example, would have saved him a good deal of anxiety and made this tale significantly shorter and simpler. And according to John Bogardus's *Spreading the Risks—Insuring the American Experience*, marine insurance was readily available at that time:

Marine insurance appeared in Italian port cities as early as the 12th century. And, the Hanseatic League actually produced detailed regulations for marine policies used in Lombardy by 1300. Venice became an insurance center. Policies (derived from the Italian word *polizza*, meaning a promise or undertaking) were given to those insuring marine risks. Ship-owners and merchants offered policies to individuals who signed their names and recorded risk percentages at the bottom of the contract, hence becoming known as "underwriters."

Suffice it to say that *The Merchant of Venice* would have been a very different story if some clever broker had persuaded Antonio to insure his cargo. Shylock the Sadistic Moneylender might have become Shylock the Friendly Underwriter, sharpening a pencil instead of a knife. And Portia would have fit in perfectly as a contract lawyer for disputed claims.

Recent scholarship seems clear in its conclusion that Shakespeare was neither an actuary nor an underwriter. While this unfortunate circumstance explains his failure to address the specifics of marine insurance, it also makes *The Merchant of Venice* even more remarkable for its detailed exploration of risk. Part comedy and part tragedy, much like the modern financial world, the play provides valuable insights on risk management more than four centuries after its creation. ●

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