

The Bernoulli family

*Dr Alexander Ressos, TEP
Attorney-at-Law (Switzerland), Solicitor (Hong Kong),
Solicitor (England & Wales)*

The Bernoulli family illustrates the path of a refugee family from commerce to learning. Its ancestors were merchants in Antwerp who, as Protestants, fled the Spanish repression in the second half of the sixteenth century and settled in Frankfurt. In 1622, Jakob Bernoulli, a spice merchant, moved from Frankfurt to Basel, acquired citizenship and established a business in the city.¹ His descendants were merchants, councillors and, above all, scholars.

In the second half of the seventeenth century, two brothers of the family, Jakob Bernoulli, born in 1654, and Johann Bernoulli, born in 1667, turned from the family business to mathematics, against the wishes of their father, who wanted them to become a theologian and a physician or merchant respectively. Jakob became professor of mathematics at the University of Basel in 1687, a chair to which Johann succeeded him in 1705. Together they developed the differential and integral calculus that Leibniz had invented, solved problems in mechanics and geometry, and trained a generation of mathematicians, among them Johann's sons Daniel and Nicolaus and the young Leonhard Euler, the son of a pastor near Basel, who became one of the greatest mathematicians of all time.²

Jakob Bernoulli's *Ars conjectandi*, published posthumously in 1713, which Part A has already mentioned, laid the foundations of the theory of probability and formulated the law of large numbers. Daniel Bernoulli's work on the measurement of risk of 1738 introduced the concept of expected utility, which explains why rational people avoid risk and why they buy insurance. These contributions are among the foundations of modern finance, insurance and risk management. It is a remarkable fact that a family of refugee spice merchants from Antwerp, who settled in Basel, produced the mathematics on which the modern regulation of bank capital, the Basel Accords, ultimately rests.

The Bernoulli family

The Bernoulli family also illustrates the Basel pattern of the conversion of commercial wealth into education and public service. The wealth of the spice merchants allowed their sons to study, to travel and to pursue careers in scholarship that did not produce immediate income. The family remained part of the Basel elite for centuries, producing merchants, councillors, professors and pastors. It is a model of the combination of commerce, learning and civic engagement that characterises the Basel *Daig*, which Part C examines.

1 Notes

1. On the Bernoulli family, its Antwerp origin, its emigration to Frankfurt and the settlement of Jakob Bernoulli in Basel (citizenship 1622), see HLS, article "Bernoulli". Dates to be verified. ↩
2. On Jakob Bernoulli (1654/55–1705), Johann Bernoulli (1667–1748), Daniel Bernoulli (1700–1782) and Leonhard Euler (1707–1783), see HLS, articles on the respective persons. Dates to be verified. ↩

For general information only. This article does not constitute legal or tax advice, does not replace advice on an individual case and creates no lawyer-client relationship. It reflects the legal position as of September 2026.

Online version: helveticaregister.com/basel-the-bernoulli-family