# A concise reading list on Knightian Uncertainty (or Ambiguity).

I plan to only talk about the **bold** papers.

**Classics:**  Anscombe & Aumann [1]; Savage [13]; vonNuemann & Morgenstern [15].

**Old Challengers:**  Keynes [11]; Knight [12]; **Ellsberg [7]**.

**Models of Uncertainty:**  **Bewley [4]**, and Bewley [5] (Aumann [2] and Aumann [3], Kannai [9]); **Gilboa & Schmeidler [8]**; **Schmeidler [14]**.

**Surveys of Innovations:**  Camerer & Weber [6]; Kelsey & Quiggin [10].

Either survey is good background material for Thursday (the second will be available outside Chris' office).

**Applications:**  Next week.

# References

[1] Anscombe, F. J. and Aumann, Robert J. [1963]: "A Definition of Subjective Probability". *Annals of Mathematical Statistics* 34: 199-205.

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[3] Aumann, Robert J. [1964]: "Utility Theory without the Completeness Axiom: A Correction". *Econometrica* 32: 210-212.

[4] Bewley, Truman F. [1986]: "Knightian Decision Theory: Part I.". Yale University, Cowles Foundation Discussion Paper N. 807.

[5] Bewley, Truman F. [1987]: "Knightian Decision Theory: Part II.". Yale University, Cowles Foundation Discussion Paper N. 868.

[6] Camerer, Colin and Weber, Martin [1992]: "Recent Developments in Modelling Preferences: Uncertainty and Ambiguity". *Journal of Risk and Uncertainty.* 325-370.

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[8] Gilboa, I. and Schmeidler, D. [1989]: "Maxmin Expected Utility with a Non-Unique Prior". *Journal of Mathematical Economics* 18: 141-153.

[9] Kannai, Yakar [1963]: "Existence of a Utility in Infinite Dimensional Partially Ordered Spaces". *Israel Journal of Mathematics* 1: 229-234.

[10] Kelsey, David, and Quiggin, John [1992]: "Theories of Choice Under Ignorance and Uncertainty". *Journal of Economic Surveys.* 6: 133-153.

[11] Keynes, John Maynard [1921]: "*A Treatise on Probability*". London, Macmillan

[12] Knight, Frank H. [1921]: "*Risk, Uncertainty and Profit*". Boston, Houghton Mi- in.

[13] Savage, L. J. [1954]: "*The Foundations of Statistics*". New York, Wiley.

[14] Schmeidler, D. [1989]: "Subjective Probability and Expected Utility without Additivity". *Econometrica*, 57: 571-587.

[15] Von Neumann, J. and Morgenstern, O. [1953]: "*Theory of Games and Economic Behavior*". Princeton, Princeton University Press.