



Université Paris-1 *Panthéon-Sorbonne*

PORTFOLIO CHOICE

Master 1 Professionnel (MoSEF) and Master 1 Economie (MBFA)

Academic Year 2009-2010
(First Semester)

Portfolio Choice

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Course Objectives

This course introduces crucial concepts of investment decision-making, portfolio theory and valuation models of financial assets, especially bonds and common stocks. Students will develop skills and learn tools for analysing and understanding financial markets. The course delivers a critical understanding of choice under uncertainty, portfolio construction, and equilibrium asset pricing (such as the CAPM and APT). The course also emphasizes the asset-pricing relations from first principles, and the consequences if some of the underlying assumptions are relaxed. Valuation models give students an insight and ability to identify overpriced and underpriced securities. Students will gain understanding of empirical testing procedures, and become aware of stylized facts from the empirical finance literature.

Time: Friday 5:00PM-8:00PM; **Location:** Amphithéâtre Bachelard (Sorbonne); **First day of the course:** 9th, October 2008; **Length:** 13 courses of three hours; **Exam:** Two-hour written test (mid January 2010).

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- 2.2 Utility Functions
- 2.3 Risk Aversion and Attitudes Toward Risks
- 2.4 Stochastic Dominance
- 2.5 Non-Expected Utility Theory

Part 3. Mean-Variance Portfolio Theory

3.1 Measuring Risk and Return

3.2 Asset Allocation with 2 Risky Assets

3.3 Introducing a Risk Free Asset and the Tobin's Separation Theorem

3.4 Asset Allocation with N risky Assets

3.5 Portfolio Diversification

Part 4. Risk Measures and Other Criteria

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5.2 The Single-Index Model

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6.2 Main Performance Measures

6.3 Alternative Performance Measures

6.4 Performance Attribution

6.5 Performance Measures with Market Timing

6.6 Security selection: Treynor-Black Model

6.7 Style Analysis

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Part 7. Market Efficiency

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7.2 EMH, martingale, fair game and no free lunch

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8.1 Bond Prices and Yields

8.2 The Term-Structure of Interest Rates

8.3 Managing Bond Portfolios

Part 9. Equity Valuation

9.1 Valuations by Comparables

9.2 Intrinsic Value versus Market Price

9.3 Dividend Discount Models and Risk Premiums

Essential References

Bodie Z., A. Kane and A. Marcus, (2009), *Investments*, 8th Edition, 1024 pages.

Copeland T. E., J.F. Weston and K. Shastri (2004), *Financial Theory and Corporate Policy*, Addison Wesley, 4th Edition, 1024 pages.

Elton E., M. Gruber, S. Brown and W. Goetzmann, (2006), *Modern Portfolio Theory and Investments Analysis*, John Wiley and Sons, 7th Edition, 752 pages.

French References

Aftalion F. (1998), *La Nouvelle Finance et la Gestion de Portefeuille*, Economica, 240 pages.

Aftalion F., Poncet P. et R. Portait (1998), *La Théorie Moderne du Portefeuille*, Que sais-je ?, PUF, 127 pages.

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Broihanne M-H., Merli M., Roger P. (2004), *Finance comportementale*, Economica, 262 pages.

Chauveau T. (2004), *Equilibre d'un marché financier*, Hermès.

Poncet P. et R. Portait (2009), *Finance de marché*, Dalloz, 1101 pages.

Viviani J.-L. (2001), *Gestion de Portefeuille*, Seconde édition, Dunod, 322 pages.

Dr. Christophe Boucher

Christophe is a Lecturer in Economics and Finance at the University of Paris-1, Economist/Strategist within AAAadvisors-QCG (ABN AMRO) and Senior Partner at Variances. He received a PhD in Economics in 2006 ("Misalignments, Aggregated Returns and Aggregated Volatility"). He has published several comments in newspapers and articles in academic journals such as *Economics Letters*, *Finance*, *International Journal of Finance*, *Applied Economics Letters* and serves as a referee in several international leading journals. His interest mainly concerns strategic allocation, predictability of returns and volatility, asset pricing and macroeconomics. He received the "Young Economist Award" in 2006 from the European Economic Association.