中国运筹学会金融工程与金融风险管理分会
第十二届学术年会

会议手册

主办单位：中国运筹学会金融工程和金融风险管理分会

福州大学

承办单位：福州大学经济与管理学院

福建·福州 ｜ 2023年11月4日-5日

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会议简介

　　由中国运筹学会金融工程与金融风险管理分会和福州大学主办，福州大学经济与管理学院承办，复旦大学协办的"中国运筹学会金融工程与金融风险管理分会第十二届学术年会"将于 2023 年 11 月 4－5 日在福建省福州市召开。此前十一届会议分别于 2010 年（上海）、2012 年（湖南衡阳）、2013 年（广东肇庆）、2014 年（山西太原，与中国系统工程学会金融系统工程与风险管理专业委员会共同举办）、2015 年（贵州贵阳）、2016 年（辽宁大连）、2017 年（湖南长沙）、2018 年（陕西西安）、2019 年（上海）、2021 年（四川成都）和 2022（河北石家庄）成功举行。本分会旨在为推动运筹学理论、方法与金融理论、实际问题相结合搭建平台，促进学术界以及金融业界的专业人士之间的交流与合作，为我国金融工程和金融风险管理的理论研究和实践应用的发展贡献力量。

福州大学经济与管理学院简介

福州大学经济与管理学院是福州大学办学规模最大的学院，办学主体位于福州大学旗山校区，形成"一院三区"办学格局，横跨福州"两江四岸"。

筚路蓝缕，薪火相传。1981 年 7 月，经福建省人民政府批准福州大学成立工业管理工程系，并于 1982 年 8 月招收首批本科生；1983 年 9 月，教育部正式批准福州大学成立财经学院，并相继成立会计系、商业经济系、计划统计系；1994 年 6 月，财经学院更名为管理学院；2002 年 5 月，成立公共管理学院；2008 年 5 月，学校与福建省交通运输集团合作成立八方物流学院；2014 年 1 月，学校在原管理学院、公共管理学院和八方物流学院的基础上组建经济与管理学院。发展至今，学院已成为一所既具有开阔的国际视野和浓厚的本土意识，又熟悉中国特色社会主义经济运行规律，以培养高层次的经济管理人才为目标的高水平教学研究型学院。

学科建设

学院坚持以一流党建引领一流学科高质量发展，学科涵盖管理学和经济学两大门类，是福州大学"双一流"建设的生力军。拥有 2 个博士后流动站；2 个一级学科博士点；13 个二级学科博士点；5 个一级学科硕士点；21 个二级学科硕士点；7 个专业硕士学位授权点。其中，管理科学与工程、工商管理 2 个一级学科在全国第四轮学科评估中双双喜获 B+，进入全国前 10%−20% 行列，是福州大学最强学科之一。管理学学科进入软科 2022 "软科世界一流学科排名"榜单，世界排名第 401-500 名。

师资队伍

学院师资力量雄厚、结构合理，拥有一批锐意创新、学术造诣深厚、享誉国内外学术界的专家学者。截至 2022 年 12 月，全院有教职工 273 人，生师比 22:1。其中专任教师 211 人，博士学位 141 人，博士学位教师占比 68.25%；现有教授 58 人、副教授 86 人、博士生导师 32 人；在高层次人才方面，学院现有"长江学者""国家万人计划"、国家百千万人才工程国家级人选等国家级人才 4 人，福建省特支计划"双百计划"人选 9 人，"闽江学者"特聘教授 4 人、"闽江学者"讲座教授 9 人，福建省高层次人才 A、B、C 类入选者 31 人。

人才培养

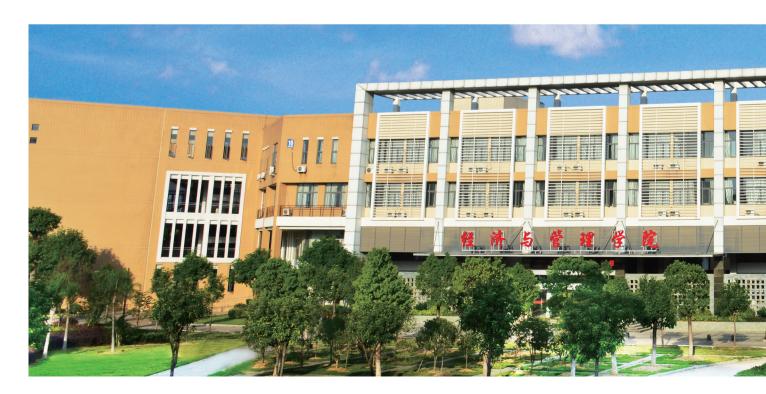学院现有本科生 2800 余人，各类研究生 2700 余人。学院本科教学特色鲜明，现有 15 个本

科专业，其中 9 个入选国家一流本科专业建设点；拥有 1 个国家级企业经济活动虚拟仿真实验教学中心；获批 1 门国家级精品课程、1 门国家级精品资源共享课、2 门国家级精品视频公开课、5 门国家级精品在线开放课程、1 门国家级虚拟仿真金课；荣获国家级教学成果二等奖 1 项、省教学成果特等奖 1 项、一等奖 6 项、二等奖 7 项。同时，学院是全国 MBA 专业学位研究生教育综合改革试点单位、海峡西岸经济区物流高级人才培养与科学研究的核心基地、MPA 专业学位研究生教育单位、福建省研究生教育创新基地。学院不断探索创新型人才培养模式，先后设立了拔尖人才、数理金融、则徐人才、远志创业、ACCA 等实验班，实施了"本硕博"贯通式人才培养新模式，教育教学水平持续提升。

科学研究

学院拥有 1 个福建省科技厅重点实验室，1 个福建省经济贸易委员会行业技术开发基地，2 个福建省社会科学研究基地，1 个福建省宣传部中国特色社会主义理论研究中心，1 个福建省财政厅财政绩效研究中心，14 个福建省教育厅人文社会科学研究基地（含 4 个省级高校新型特色智库）。八年多来，学院新增 100 余项国家社科基金和国家自然基金项目，其中重点、重大 7 项；教师研究成果获省部级以上奖项 100 余项，其中获教育部人文社会科学奖 2 项，省社会科学优秀成果一等项 4 项，二等奖 14 项，三等奖 34 项，青年佳作 6 个；横纵向科研到校经费 1 亿多元，产生了一大批具有国内外影响力的原创性科研成果。

社会服务

学院拥有四个省级新型高端智库，围绕福建省数字、海洋、绿色、文旅"四大经济"高质量发

展，组织开展团队合作研究，形成了一批高水平、集约型智库成果，3 项决策咨询报告被中央领导人批示、20 余项建议获省领导批示。学院着力打造专业学位和高端培训等继续教育品牌。近 20 年来，MBA 等在职专业学位教育已毕业 3600 余人，培养了大批政界、商界优秀校友，荣获"2020 年度中国商学院最佳 MBA 项目 TOP100 第 66 名"。作为福建省公务员培训基地，圆满完成甘肃定西市扶贫协作 1000 名干部培训和"闽宁对口帮扶协作"研修班等培训任务。学院 EDP 中心成立以来，培养了企业界精英 600 多名；与英国威尔士 - 三一圣大卫大学联合培养工商管理硕士，已毕业 200 多名。

对外交流

学院坚持多方位构建拓展开放式办学格局，积极与清华大学、北京大学、中国人民大学、中科院大学等国内名校建立密切校际合作关系，同时拓展与国外及港、澳、台湾地区高校和研究机构的合作交流，先后与美国纽约州立大学、美国德州理工大学、美国南加州大学、英国威尔士大学、德国路德维希港大学、德国科布伦茨 - 兰道大学、德国美茵大学、意大利罗马第三大学、新西兰梅西大学、西悉尼大学、香港城市大学、台湾中国科技大学、台湾东吴大学、台湾淡江大学、国立高雄大学、台湾铭传大学等 20 多所海外（境外）高校建立友好校际合作关系，并多次承办国际性、全国性学术会议。学院教师赴国外和港台等地参加国际会议或作访问学习日益频繁。在参与联合国劳工组织事务实习、城市应急管理研究等方面，主动对接国家"一带一路"倡议，尽显福大经管人的担当作为。

会议组织机构

主办单位： 中国运筹学会金融工程与金融风险管理分会

福州大学

程序委员会：（按姓氏拼音先后排名）

主　席：胡奇英　复旦大学	凌爱凡　上海外国语大学
黄志刚　福州大学	刘彦初　中山大学
王应明　福州大学	李　平　北京航空航天大学
	罗　俊　上海交通大学
副 主 席：陈志平　西安交通大学	雷　蕾　重庆大学
洪　流　复旦大学	彭一杰　北京大学
马敬堂　西南财经大学	史永东　东北财经大学
王小群　清华大学	石　芸　华东师范大学
王永进　南开大学	隋　聪　大连海事大学
张立卫　大连理工大学	文凤华　中南大学
朱书尚　中山大学	王海婴　香港中文大学
	徐凤敏　西安交通大学
委　员：薄立军　中国科学科技大学	徐玉红　苏州大学
崔雪婷　上海财经大学	姚　京　复旦大学
蔡　宁　香港科技大学	杨学伟　南京大学
陈昕韫　香港中文大学(深圳)	杨招军　南方科技大学
陈树敏　广东工业大学	杨金强　上海财经大学
高建军　上海财经大学	周　科　湖南大学
高雪峰　香港中文大学	曾　燕　中山大学
何雪冬　香港中文大学	郑小金　同济大学
胡　捷　上海高级金融学院	
胡支军　贵州大学	
胡照林　同济大学	
韩　乾　厦门大学	
吉小东　河北师范大学	

组织委员会：（按姓氏拼音先后排名）

主　　席：高建军 上海财经大学
　　　　　严佳佳 福州大学

副 主 席：姜广鑫 哈尔滨工业大学
　　　　　周　科 湖南大学
　　　　　吴伟平 福州大学
　　　　　吴　鹏 福州大学
　　　　　李德彪 福州大学
　　　　　龙厚印 福州大学

委　　员：李艺全 福州大学
　　　　　曾祥棋 福州大学
　　　　　林　威 福州大学
　　　　　蔡乌赶 福州大学
　　　　　裴　宏 福州大学
　　　　　王诗栩 福州大学
　　　　　张　超 福州大学
　　　　　傅传锐 福州大学
　　　　　翁志超 福州大学
　　　　　郭亚伟 福州大学
　　　　　徐泽林 福州大学

秘　　书：谢金言 上海财经大学
　　　　　金成能 上海财经大学
　　　　　梁英豪 福州大学
　　　　　连凌进 福州大学
　　　　　潘起彤 福州大学
　　　　　闫明珠 福州大学

简要日程（11 月 4 日）

11 月 4 日				
主会场 福建会堂五层会议厅				
7：50-8：30	开幕式			
8：30-9：15	大会主旨报告 1：山东大学陈增敬教授			
9：15-9：20	提问环节			
9：20-10：05	大会主旨报告 2：恒生前海基金管理有限公司刘宇			
10：05-10：10	提问环节			
10：10-10：25	茶 歇			
	福建会堂五层 会议厅	福建会堂三层 三明厅	福建会堂三层 莆田厅	福建会堂三层 龙岩厅
10：25-10：55	特邀报告 1： 湖南大学 唐国豪	特邀报告 2： 香港理工大学 许左权	特邀报告 3： 南方科技大学 杨招军	特邀报告 4： 中山大学岭南学院 刘彦初
10：55-11：10	茶 歇			
分组报告				
	福建会堂五层 会议厅	福建会堂三层 三明厅	福建会堂三层 莆田厅	福建会堂三层 龙岩厅
11：10-12：10	分组报告（一） **金融优化前沿理论 与算法** 田德建 田博士 Zhang Tingting 陈博	分组报告（二） **系统性风险管理 I** 潘弘杰 曹杰 李舒娴 陈妍	分组报告（三） **资本市场 I** 周科 刘晓群 赵文婷 陆智超	分组报告（四） **供应链金融与金融优 化 I** 李启洋 黄荣义 许豪 阳宗灏
13：55-16：00	"中国式现代化与金融高质量发展"专题研讨分论坛 （腾讯会议：884-455-036）			
	福建会堂三层 三明厅	福建会堂三层 莆田厅	福建会堂三层 龙岩厅	福建会堂四层 厦门厅 福建会堂四层 宁德厅

	14:00-14:30	特邀报告 5： 上海交通大学 宋颖达	特邀报告 6： 南京大学 陈媛媛	特邀报告 7： 香港科技大学 蔡宁	特邀报告 8： 中山大学 夏俐	特邀报告 9： 苏州大学 徐玉红
	14:30-14:45	茶　歇				
下	14:45-15:45	分组报告 （五） **金融统计优化 与金融管理** 曹昊 练腾 顾祖瑶 李凌云	分组报告 （六） **公司金融 I** 胡磊 樊晓霞 任幸子 任幸子	分组报告 （七） **绿色金融** 徐泽林 谭英贤 蔡兴 黄蕾	分组报告 （八） **资本市场 II** 俞乃畅 赵龙峰 夏雯靖 陈杨超	分组报告 （九） **投资组合选择** 韦佳昕 沈佳瑜 王韬 冯鋆
	15:45-16:00	茶　歇				
	16:00-17:00	分组报告 （十） **期权定价** 卓小杨 蒋萍萍 郭芝宇 徐光利	分组报告 （十一） **养老基金投资 与风险管理** 赵慧 王佩 卞利花	分组报告 （十二） **信息披露，ESG 与风险管理** 吴燕丰 郭世俊 戴伟民 冯丽璇	分组报告 （八） **资本市场 II** 宋兆烨 贺志芳 刘晓明	分组报告 （十三） **尾部风险管理** Ma Shumin 严兴 卓俊晖 余志辉
午	17:00-17:15	茶　歇				
	17:15-18:30	分组报告 （十四） **资产定价与宏 观金融风险** 王冠英 白逸洲 阎冬 赵林海	分组报告 （十五） **固定收益与信 用风险管理** 邓晴元 李嘉豪 郝立亚 邵研	分组报告 （十六） **供应链金融与 金融优化 II** 王论意 孙玉哲 李晶 陈甜 许豪	分组报告 （十七） **系统性风险管 理 II** 林朝颖 张子茜 康志鑫 赵欣瑶 杨璐	分组报告 （十八） **ESG、气候风险 与碳风险 I** 马勇 罗德庆 欧阳海琴 周骐
	18:30-18:45	理事会议（福建会堂四层宁德厅）				

简要日程（11 月 5 日）

	11 月 5 日			
	主会场 福建会堂五层会议厅			
8:00-8:45	大会主旨报告 3：香港中文大学陈南教授			
8:45-8:50	提问环节			
8:50-9:05	**茶 歇**			
	福建会堂五层会议厅	福建会堂三层三明厅	福建会堂三层莆田厅	第四分会场龙岩厅
9:05-9:35	特邀报告 10：香港中文大学（深圳）陈昕韫	特邀报告 11：哈尔滨工业大学姜广鑫	特邀报告 12：中国人民大学高昊宇	**青年学者最佳论文** 张颢严 周羿
9:35-9:50	**茶 歇**			
	分组报告			
	福建会堂五层会议厅	福建会堂三层三明厅	福建会堂三层莆田厅	第四分会场龙岩厅
9:50-11:05	分组报告（十九） **风险度量与风险管理** 张琨 黄伟桓 张功球 秦聪 Lin Zhenmei	分组报告（二十） **动态投资组合** 刘嘉 马贵元 赵志华 景奎 郑禹	分组报告（二十一） **金融风险** 赵霞 欧阳资生 朱晓谦 郭艳红	**青年学者最佳论文** 张璐瑶 王时坤 沈金叶 梁果 朱红兵
11:05-11:20	**茶 歇**			
11:20-12:05	分组报告（二十二） **动态策略与金融市场** 李志成 颜廷进 孔令杰	分组报告（二十三） **公司金融 II** 肖金利 刘新恒 李国文	分组报告（二十四） **金融衍生品** 郑岩 彭绍聪 孙景云	分组报告（二十五） **ESG、气候风险与碳风险 II** 邓翔 汪先珍 方焕颖
12:05-12:25	**闭幕式（福建会堂五层会议厅）**			

上 午

详细日程

	时间	会议内容	主持人
	7:30-7:50	参会人员报到	
		会议开幕式	
	7:50-7:55	嘉宾介绍	主持人： 高建军
	7:55-8:00	福州大学黄志刚教授（原福州大学副校长）致辞	
	8:00-8:05	福州大学经济与管理学院院长王应明教授致辞	
	8:05-8:10	中国运筹学会金融工程与金融风险管理分会理事长胡奇英教授致辞	
	8:10-8:30	参会人员合影	
11	8:30-9:15	**大会主旨报告1：山东大学陈增敬教授** Central limit theorems for multi-armed bandit problems and Quantum Walks	主持人：胡建强
	9;15-9:20	提问环节	
月	9:20-10:05	**大会主旨报告2：恒生前海基金管理有限公司刘宇** 基金管理行业发展及趋势分析	主持人：朱书尚
	10:05-10:10	提问环节	
	10:10-10:25	**茶　歇**	
4		**大会特邀报告（一）**	
	10:25-10:55	Extrapolation beyond Peers: An Asset Pricing Perspective 报告人：湖南大学　唐国豪	主持人：宋颖达
日		**大会特邀报告（二）**	
	10:25-10:55	Optimal dividend payout with path-dependent constraint 报告人：香港理工大学 许左权	主持人：陈媛媛
上		**大会特邀报告（三）**	
	10:25-10:55	The new timing of debt renegotiations 报告人：南方科技大学 杨招军	主持人：蔡宁
午		**大会特邀报告（四）**	
	10:25-10:55	Teaching Economics to Machines 报告人：中山大学岭南学院 刘彦初	主持人：夏俐
	10:55-11:10	茶歇	
	时间	**会议内容**	**主持人**
		分组报告（一）	田博士 （湖南大学）
		金融优化前沿理论与算法	
	11:10-11:25	Robust optimized certainty equivalents and quantiles for loss positions with distribution uncertainty 报告人：田德建（中国矿业大学）	

	11:25-11:40	Credit guarantee and coordination for a capital constraint supply chain with risk-averse agents	
		报告人：田博士（湖南大学）	
	11:40-11:55	Evaluation Timing with Dynamic Information: Optimization and Heuristic	
		报告人：Zhang Tingting（苏州大学）	
	11:55-12:10	A robo-advisor system: expected utility modeling via pairwise comparisons	
		报告人：陈博（西安交通大学）	
分组报告（二）			
系统性风险管理Ⅰ			
	11:10-11:25	我国商业银行影子银行业务与系统性风险研究——基于银行动态关联网络视角	
		报告人：潘弘杰（宁波大学）	
	11:25-11:40	关联网络重构与系统性风险监管：一个最优化视角	刘志峰（海南大学）
		报告人：曹杰（长沙理工大学）	
	11:40-11:55	地方政府隐性债务与银行体系系统性风险——基于地方融资平台视角的研究	
		报告人：李舒娴（中山大学）	
	11:55-12:10	公募REITs能否成为系统性风险的"稳定器"？——基于多层信息网络视角	
		报告人：陈妍（长沙理工大学）	
分组报告（三）			
资本市场Ⅰ			
	11:10-11:25	Stock Return Forecasting Based on Heterogeneous Graph Neural Network of Industrial chain	
		报告人：周科（湖南大学）	
	11:25-11:40	A 股行业 ETF 对知情套期保值交易与市场效率的影响研究	周科（湖南大学）
		报告人：刘晓群（海南大学）	
	11:40-11:55	媒体影响下的双层投资者行为传染模型研究	
		报告人：赵文婷（宁夏大学）	
	11:55-12:10	具有较大波动的资产价格预测：以比特币为例	
		报告人：陆智超（苏州大学）	
分组报告（四）			
供应链金融与金融优化Ⅰ			李启洋（福州大学）
	11:10-11:25	Timing of Multilateral Bargaining in a Dual-sourcing StructureConsidering Supply Disruption	
		报告人：李启洋（福州大学）	

	11:25-11:40	Lending to Third-party Sellers with Platform Loan 报告人：黄荣义（福州大学）	
	11:40-11:55	模糊信息下多关联企业多层级网络安全投资优化模型 报告人：许豪（湖南工商大学）	
	11:55-12:10	Doing Well by Doing Good: Interest Rate Determination for Unsecured Personal Loans 报告人：阳宗灏（香港城市大学）	
下	**13:55-16:00**	**"中国式现代化与金融高质量发展"专题研讨分论坛** **（腾讯会议：884-455-036）**	
	13：55-14：00	福州大学黄志刚教授	
	14：00-14：15	武汉大学宋敏教授	
	14：15-14:30	厦门大学朱孟楠教授	
	14:30-14:45	南京大学沈坤荣教授	
	14:45-15:00	厦门大学周颖刚教授	龙厚印 （福州大学）
	15:00-15:15	南京大学范从来教授	
	15:15-15:30	厦门大学郭晔教授	
	15:30-15:45	复旦大学杨长江教授	
	15:45-16:00	厦门大学蔡熙乾教授	
		大会特邀报告（五）	
	14:00-14:30	Computation of Intra-Horizon Risk Measures for Models with Stochastic Volatility and Jumps 报告人：上海交通大学 宋颖达	主持人：唐国豪
		大会特邀报告（六）	
	14:00-14:30	How does the Introduction of Hidden Orders Affect Limit Order Markets? 报告人：南京大学 陈媛媛	主持人：许左权
		大会特邀报告（七）	
	14:00-14:30	Data Collection and Machine Learning with Privacy Preservation 报告人：香港科技大学 蔡宁	主持人：杨招军
午		**大会特邀报告（八）**	
	14:00-14:30	Multi-Period Mean-Variance Portfolio Selection: An MDP Approach 报告人：中山大学 夏俐	主持人：刘彦初
		大会特邀报告（九）	
	14:00-14:30	Extended Dynamic Programming Principle and Applications to Time-Inconsistent Control 报告人：苏州大学 徐玉红	主持人：高昊宇
	14:30-14:45	**茶歇**	

		分组报告（五）		
		金融统计优化与金融管理		
13	14:45-15:00	Systemetic Risk: Black-box CoVaR Estimation and Sensitivity Analysis	王天翔	
		报告人：曹昊（复旦大学）	（华东师范大学）	
	15:00-15:15	Black-box optimization with simultaneous statistical inference		
		报告人：练腾（复旦大学）		
	15:15-15:30	Optimal Attention Allocation: Picking Alpha or Betting on Beta?		
		报告人：顾祖瑶（华东师范大学）		
	15:30-15:45	企业动态创新决策与政府补贴		
		报告人：李凌云（西南财经大学）		
		分组报告（六）		
		公司金融Ⅰ		
下	14:45-15:00	注册制改革会降低股权融资成本吗？基于创业板的溢出效应研究	任幸子	
		报告人：胡磊（湖南工商大学）	（首都经济贸易大学）	
	15:00-15:15	供应链关系与企业并购行为		
		报告人：樊晓霞（海南大学）		
	15:15-15:30	Female Directors and CSR: Does the Presence of Female Directors Affect CSR Focus?		
		报告人：任幸子（首都经济贸易大学）		
	15:30-15:45	Non-financial Institutional Blockholder, Exit Threats, and Firms CSR Performance		
		报告人：任幸子（首都经济贸易大学）		
		分组报告（七）		
		绿色金融		
午	14:45-15:00	"双碳"目标下机构投资者支持绿色创新研究——来自中证 800/1000 指数 断点回归的证据	谭英贤	
		报告人：徐泽林（福州大学）	（江西财经大学）	
	15:00-15:15	Green technology innovation with environmental constraints		
		报告人：谭英贤（江西财经大学）		
	15:15-15:30	绿色金融政策怎样影响污染企业的产能利用率？		
		报告人：蔡兴（湖南师范大学）		
	15:30-15:45	工业机器人应用对绿色全要素生产率的影响研究		
		报告人：黄蕾（湖南师范大学）		
		分组报告（八）		
		资本市场Ⅱ		

	14:45-15:00	股权分置改革下的权证市场是否实现了其本源功能？	
		报告人：俞乃畅（南京大学）	
	15:00-15:15	Higher-order financial networks	
		报告人：赵龙峰（西北工业大学）	
	15:15-15:30	Inferring jump and volatility dynamics from the S&P 500 and VIX markets: Specification analysis	俞乃畅 （南京大学）
		报告人：夏雯靖（中国科学技术大学）	
	15:30-15:45	公司违规是否能引发股票价格暴跌？ ——基于信息传播和信息隐藏视角的研究	
		报告人：陈杨超（南昌大学）	
	16:15-16:30	行为金融下的房地产投资分析	
		报告人：宋兆烨（河北师范大学）	
	16:30-16:45	气候政策不确定性对全球能源价格和股票价格的动态影响研究	
		报告人：贺志芳（江南大学）	
	16:45-17:00	基金经理的货币政策感知与基金风险承担	
		报告人：刘晓明（中国人民大学）	
下午	分组报告（九）		
	投资组合选择		
	14:45-15:00	International Portfolio Optimization with Chance Constraints	
		报告人：韦佳昕（西安交通大学）	
	15:00-15:15	Learning mixture policies for online portfolio selection	韦佳昕 （西安交通大学）
		报告人：沈佳瑜（西安交通大学）	
	15:15-15:30	Optimal reinsurance contract and investment strategy for multiple competitive-cooperative insurers and a reinsurer	
		报告人：王韬（西安交通大学）	
	15:30-15:45	Nonconcave optimal portfolio for participating insurance under mean-reverting asset returns	
		报告人：冯鋆（西南财经大学）	
	15:45-16:00	茶歇	
	分组报告（十）		
	期权定价		卓小杨 （北京理工大学）
	16:00-16:15	The Risk and Return Dynamics of Contingent Claim Portfolios	
		报告人：卓小杨 （北京理工大学）	

15	16:15-16:30	Analytical solvability and exact simulation in models with affine stochastic volatility and Lévy jumps	
		报告人：蒋萍萍（苏州大学）	
	16:30-16:45	VIX Option Pricing with Good and Bad Volatility of Volatility	
		报告人：郭芝宇（北京大学）	
	16:45-17:00	An Analytical Approximation for Exchange Option Valuation in GARCH-type Model	
		报告人：徐光利（对外经济贸易大学）	
	分组报告（十一）		
	养老基金投资与风险管理		
	16:00-16:15	Time-consistent investment and contribution adjustment strategies for a collective DC pension plan with stochastic salary under smooth ambiguity utility	王佩（广东金融学院）
		报告人：赵慧（天津大学）	
	16:15-16:30	Equilibrium investment strategy for a DC pension plan with the return of premiums clause and mispricing under imperfect information	
		报告人：王佩（ 广东金融学院）	
	16:30-16:45	Equilibrium multi-period investment strategy for a DC pension plan with incomplete information: hidden Markov model	
		报告人：卞利花（徐州工程学院）	
	分组报告（十二）		
	信息披露，ESG 与风险管理		
	16:00-16:15	Method of moments estimation for stochastic volatility models	雷蕾（重庆大学）
		报告人：吴燕丰（复旦大学）	
	16:15-16:30	Proactive Enforcement of Information Disclosure and Stock Price Synchronicity	
		报告人：郭世俊（重庆大学）	

	16:30–16:45	Generating Copula-Correlated Random Variables: A Sequential Acceptance-Rejection Method	
		报告人：戴伟民（复旦大学）	
	16:45–17:00	The ESG Impacts of Capital Market Liberalization: Evidence from the Shanghai-Hong Kong Connect and the Shenzhen-Hong Kong Connect	
		报告人：冯丽璇（重庆大学）	
	分组报告（十三）		
	尾部风险管理		
	16:00–16:15	Efficient forecast with copula-based regularized transfer learning	Ma Shumin （北京师范大学-香港浸会大学联合国际学院）
		报告人：Ma Shumin（北京师范大学-香港浸会大学联合国际学院）	
	16:15–16:30	Generative CVaR Portfolio Optimization with Attention-Powered Sequential Learning of Factor Models	
		报告人：严兴（中国人民大学）	
	16:30–16:45	Generalized tail risk measures based on market sentiment	
		报告人：卓俊晖（西安交通大学）	
	16:45–17:00	On the Maximization of Long-Run Reward CVaR for Markov Decision Processes	
		报告人：余志辉（中山大学）	
	17:00–17:15	**茶歇**	
	分组报告（十四）		
	资产定价与宏观金融风险		

晚	17:15-17:30	China's Peer-based IPO Valuation: The Efficiency of Market Versus Regulatory Pricing Regimes 报告人：王冠英（天津大学）	王冠英 （天津大学）
	17:30-17:45	Option pricing under the TGARCH model with NHP jump Intervention 报告人：白逸洲（中国民航大学）	
	17:45-18:00	A numerical study of the utility-indifference approach for pricing American options 报告人：阎冬（对外经济贸易大学）	
	18:00-18:15	基于资产负债表的中国宏观金融风险研究 报告人：赵林海（华侨大学）	
上		**分组报告（十五）**	凌爱凡 （上海外国语大学）
		固定收益与信用风险管理	
	17:15-17:30	债券募集说明书模糊信息对发行利差的影响 报告人：邓晴元（四川大学）	
	17:30-17:45	谁为"台风冲击"的损失买单：政府还是企业？—来自台风冲击下公司债利差的证据 报告人：李嘉豪（江西财经大学）	
	17:45-18:00	主权信用风险的自适应高维时变贝叶斯建模与时频域连通研究 报告人：郝立亚（宁波大学）	
	18:00-18:15	Finite-time stability and optimal control for stochastic credit risk contagion model with sentiment 报告人：邵研（宁夏大学）	
		分组报告（十六）	陈甜 （对外经济贸易大学）
		供应链金融与金融优化 II	
	17:15-17:30	基于参保者收入异质性的养老金结构优化问题研究 报告人：王论意（中国人民大学）	
	17:30-17:45	Social Comparison and Corporate Social Responsibility in Duopoly 报告人：孙玉哲（中国人民大学）	
	17:45-18:00	中国银行供应链金融业务模式研究 报告人：李晶（河北师范大学）	

晚	18:00-18:15	Liquidity Provision and Its Information Content in Decentralized Markets	
		报告人：陈甜（对外经济贸易大学）	
	18:15-18:30	不确定损失下企业网络安全防御决策的鲁棒优化研究	
		报告人：许豪（湖南工商大学）	

上		**分组报告（十七）**	
		系统性风险管理 II	
	17:15-17:30	风险厌恶转变视角下货币政策的收入分配效应研究	贺志芳（江南大学）
		报告人：林朝颖（福州大学）	
	17:30-17:45	Optimal bailout strategy of systemic risk with cash injection constraint under lending and share cross-holding network	
		报告人：张子茜（西安交通大学）	
	17:45-18:00	宏观审慎政策预期管理效果评估	
		报告人：康志鑫（兴业证券股份有限公司）	
	18:00-18:15	Community analysis of US banking networks based on financial similarity	
		报告人：赵欣瑶（苏州大学）	
	18:15-18:30	破净溢出效应与系统性金融风险	
		报告人：杨璐（深圳大学）	

		分组报告（十八）	
		ESG、气候风险与碳风险 I	
	17:15-17:30	Extreme Climate Risk Aligned: A Powerful Predictor of Equity Risk Premiums	马勇（湖南大学）
		报告人：马勇（湖南大学）	
	17:30-17:45	ESG 评级不确定性和噪音对可持续投资的影响研究	
		报告人：罗德庆（湖北经济学院）	
	17:45-18:00	Climate Change, Policy Transformation, and Stock Market in China: Insights from Dynamic Return and Volatility Spillovers	
		报告人：欧阳海琴（江西师范大学）	

19	18:00-18:15	我国社保基金的碳足迹与碳风险暴露研究	
		报告人：周骐（华南理工大学）	
	18:30-18:45	理事会议（福建会堂四层宁德厅）	

11 月 5 日 上 午	8:00-8:45	**大会主旨报告 3：香港中文大学陈南教授** **A Two Timescale Evolutionary Game Approach to Multi-Agent Learning and its Application in Algorithmic Collusion**	主持人：胡奇英
	8:45-8：50	提问环节	
	8:50-9:05	**茶歇**	
	大会特邀报告（十）		
	9:05-9:35	Data-Pooling for Personalized Intervention in Healthcare 报告人：香港中文大学（深圳） 陈昕韫	主持人：蔡宁
	大会特邀报告（十一）		
	9:05-9:35	Adaptive Importance Sampling for Efficient Stochastic Root Finding and Quantile Estimation 报告人：哈尔滨工业大学 姜广鑫	主持人：徐玉红
	大会特邀报告（十二）		
	9:05-9:35	Pricing the Priceless: The Cost of Biodiversity Preservation 报告人：中国人民大学 高昊宇	主持人：夏俐
	9:35-9:50	**茶歇**	
	分组报告（十九）		
	风险度量与风险管理		
	9:50-10:05	Simulating the Confidence Interval for Conditional Value-at-Risk 报告人：张琨（中国人民大学）	宋颖达 （上海交通大学）
	10:05-10:20	Estimating Systemic Risk within Financial Networks: A Two-Step Nonparametric Method 报告人：黄伟桓 （南京大学）	

	10:20-10:35	Speed and Duration of Drawdown under General Markov Models	
		报告人：张功球（香港中文大学(深圳)）	
	10:35-10:50	Portfolio Selection with a Basket Credit-Linked Note	
		报告人：秦聪（苏州大学）	
11	10;50-11;05	Optimal consumption and portfolio selection for retirees under inflation and pension default risk	
		Lin Zhenmei（西南财经大学）	
月	**分组报告（二十）**		
	动态投资组合		
5	9:50-10:05	Intelligent Fund Recommendation with Dynamic Utility Learning	
		报告人：刘嘉（西安交通大学）	
日	10:05-10:20	Dynamic trading with Markov liquidity switching	徐凤敏 马贵元（西安交通大学）
上		报告人：马贵元（西安交通大学）	
午	10:20-10:35	Green Portfolio Optimization under Uncertainty and Randomness	
		报告人：赵志华（西安电子科技大学）	

		A multi-objective dynamic programming for ESG-integration investment strategy of TDFs	
	10:35-10:50		
		报告人：景奎（西安交通大学）	
11	10:50-11:05	基于期望分位数回归的函数型指数追踪模型研究	
		报告人：郑禹（西安工程大学）	
月	**分组报告（二十一）**		
	**金融风险**		
	9:50-10:05	中国金融机构系统重要性研究--基于 QC-ISAM-ARMA 带耦合时序网络	
5		报告人：赵霞（上海对外经贸大学）	
	10:05-10:20	基于 ESMD-CFastICA-BiLSTM-Attention 模型的系统性金融风险预测研究	张玲（广东金融学院）
日		报告人：欧阳资生（湖南师范大学）	
	10:20-10:35	考虑审计要素多重语义关联的财务欺诈识别研究	
		报告人：朱晓谦（中国科学院大学）	
上	10:35-10:50	地方政府债券对我国金融市场的尾部风险溢出研究——基于动态网络模型	
		报告人：郭艳红（南方科技大学）	
午	**青年学者最佳论文**		
	9:05-9:20	Bond pricing under the sticky CIR process 报告人：张颢严	
	9:20-9:35	A Simulation-Based Method for Estimating Systemic Risk Measures 报告人：周羿	
	9:50-10:05	Risk-sensitive Markov decision processes with long-run CVaR criterion	

		报告人：张璐瑶	
	10:05-10:20	Integrating Information Implied by Option Prices, Market Portfolio andHistorical Data in Portfolio Selection	
		报告人：王时坤	
	10:20-10:35	An Efficient and Provable Sequential Quadratic Programming Method for American and Swing Option Pricing	
		报告人：沈金叶	
	10:35-10:50	A FAST Method for Nested Estimation	
		报告人：梁果	
	10:50-11:05	Contrarian Bets in Order Imbalance	
		报告人：朱红兵	
11 月 5 日 上 午	11:05-11:20	**茶歇**	
	分组报告（二十二） **动态策略与金融市场**		陈媛媛 （南京大学）
	11:20-11:35	The Impact of Digital Transformation on Firm's Risk: Evidence from Chinese Listed Firms 报告人：李志成（湖南大学）	
	11:35-11:50	Dynamic Asset-Liability Management with Frictions 报告人：颜廷进 （华东师范大学）	
	11:50-12:05	Attention Allocation on Factor Learning and Dynamic Portfolio Selection 报告人：孔令杰（上海财经大学）	
	分组报告（二十三） **公司金融Ⅱ**		肖金利 （厦门大学）
	11:20-11:35	控股股东总会挤占员工收入份额吗？——来自金字塔层级公司的证据 报告人：肖金利（厦门大学）	
	11:35-11:50	土地财政压力与企业异地投资：基于 A 股上市公司的经验证据 报告人：刘新恒（长沙理工大学）	
	11:50-12:05	文本信息特征与企业经营风险 ——基于企业决策的中介与调节效应	

		报告人：李国文（中央财经大学）	
	分组报告（二十四）		
	金融衍生品		
	11:20-11:35	全球风险厌恶对人民币汇率指数的异质性影响研究	
		报告人：郑岩（海南大学）	
	11:35-11:50	Beyond Forward-Looking Approach: Enhancing Market Timing with Option-Implied Probability Weighting	
		报告人：彭绍聪（华东师范大学）	郑岩（海南大学）
11	11:50-12:05	基于多维信息的黄金期货价格短期预测及交易策略研究	
月		报告人：孙景云（兰州财经大学）	
5	**分组报告（二十五）**		
日	**ESG、气候风险与碳风险Ⅱ**		
	11:20-11:35	碳风险与银行贷款风险：机制与对策	
上		报告人：邓翔（中南财经政法大学）	
	11:35-11:50	A股投资者关心气候风险吗？——来自期权市场的证据	汪先珍（上海纽约大学）
		报告人：汪先珍（上海纽约大学）	
午	11:50-12:05	气候风险对农业企业债务期限结构的影响研究	
		报告人：方焕颖（华南理工大学）	
	12:05-12:25	**闭幕式（福建会堂五层会议厅）**	

大会主旨报告人简介

陈增敬

　　山东大学山东大学齐鲁证券金融研究院院长，2011 年获孙冶方经济科学奖、2015 年获国家自然科学二等奖（独立），曾获国家杰出青年基金获得者，"长江学者奖励计划"特聘教授。

　　陈增敬教授的主要从事金融数学的研究：继 de Moivre 和高斯提出的（线性）正态分布后，首次提出和得到了非线性正态分布密度的显示表达式，发展了传统的正态分布；证明了不完备市场资产定价和多臂机服从非线性正态分布，研究成果在 Econometrica、 Annals of probability、Journal of economic theory、JRSSB、Automatica、Neurocomputingh 和 Nature 子刊等顶级期刊发表。 其中，发表在国际顶刊 "Econometrica" 发布的论文被誉为是大陆学者第一篇发表在该期刊发表的论文，该论文提出的资产定价公式被称为 Chen-Epstein 公式，被两位诺贝尔经济奖获得者多次引用推广和高度评价，诺贝尔经济奖获得者 Hansen 在其获奖报告中称其为一个 insightful 公式，也获得国内经济最高奖 - 孙冶方经济科学奖。他的成果不仅在数学上发展了非线性概率统计，又在金融上发展资产定价理论。

陈南

Nan Chen is the Professor of Systems Engineering and Engineering Management at The Chinese University of Hong Kong. His research interests are quantitative methods in finance and risk management, Monte Carlo simulation, and applied probability.

Prof. Chen serves as Director of the Bachelor of Engineering Program in Financial Technology at CUHK, also Director of Master of Science Program in Financial Engineering at CUHK-Shenzhen. He is now an Associate Editor of Mathematical Finance, International Review of Finance

会计学博士，特许金融分析师 (CFA)，现任恒生前海基金管理有限公司董事、总经理。

刘博士长期从事投资基金及资产管理相关工作，对境内外的金融市场、投资管理理论与实务、基金投资及资产管理业务等方面具有丰富经验。曾任恒生银行投资部投资产品助理经理、副总裁，恒生投资管理有限公司机构业务执行副总裁。恒生前海基金管理有限公司成立于 2016 年，是首家根据 CEPA10 框架设立的港资控股公募基金管理公司，经营范围包括基金募集、基金销售、特定客户资产管理、资产管理和中国证监会许可的其他业务。

刘宇

大会特邀报告人简介

女，2009 年本科毕业于北京大学数学科学学院，2014 年获得美国哥伦比亚大学运筹学博士学位，现任香港中文大学（深圳）数据科学学院副教授。她的主要研究领域为应用概率学、随机模拟、强化学习以及在医疗健康和通讯网络中的应用。研究成果多次发表在 Annals of Applied Probability、Mathematics of Operations Research，Operations Research 和 ICLR 等领域知名期刊和会议上。2019 年当选为美国运筹学和管理学研究协会（INFORMS）应用概率学会理事会成员，2020 年至今任职应用概率领域知名国际期刊《Journal of Applied Probability》和《Advances in Applied Probability》编委。先后主持多项美国自然科学基金（NSF）项目和中国国家自然科学基金项目，获得第十五届华人学者管理科学与工程国际年会。

陈昕韫

夏俐

中山大学管理学院教授。分别于 2002 年和 2007 年在清华大学自动化系获得学士和博士学位，博士生期间在香港科技大学联合培养，博士毕业后分别在 IBM 中国研究院、沙特国王科技大学从事科研工作，2011 年至 2019 年在清华大学自动化系任教，历任讲师、副教授（博士生导师），2019 年调入中山大学。

主要研究方向为强化学习、马氏决策过程、排队论、博弈论等，以及在能源、金融等领域的应用研究。发表论文 100 余篇，获得 10 余项中国和美国发明专利，主持 4 项国家自然科学基金项目、多项国家重点研发计划子课题、多项华为公司等合作研发项目。担任 IEEE Transactions on Automation Science and Engineering、Discrete Event Dynamic Systems 等国际权威 SCI 期刊的副主编（AE）等学术兼职。曾获 2021 年和 2014 年教育部高等学校自然科学二等奖等学术奖励。

徐玉红

苏州大学研究员，博士生导师，仲英青年学者。2013 年毕业于山东大学，师从彭实戈院士。先后访问法国西布列塔尼大学（博士后）、新加坡国立大学（研究员）、香港大学等学校。长期从事量化金融方面的研究，研究结果在《Mathematical Finance》、《Management Science》、《Quantitative Finance》等杂志发表。任中国运筹学会金融工程与风险管理分会第三、四届常务理事、中国优选法统筹法与经济数学研究会量化金融与保险分会第一届理事、全国工业统计研究会金融科技与大数据分会第一届理事、中国工业与应用数学协会金融工程分会青年组委员、金融数学与数据处理年会程序委员。先后主持国家自然科学基金 3 项、江苏省自然科学基金 2 项、上海市开放课题 1 项。

刘彦初

刘彦初博士现就职于中山大学岭南学院，担任副院长，金融学教授，博士生导师。香港中文大学金融工程学博士、博士后，中国科学技术大学理学硕士与理学学士。主要研究兴趣为金融工程，金融科技，以及相关应用。在上述研究领域取得多项成果，并发表于《管理科学学报》、《Operations Research》、《INFORMS Journal on Computing》、《Journal of Futures Markets》、《Journal of Economic Dynamics and Control》、《Quantitative Finance》、《European Journal of Operational Research》、《Insurance: Mathematics and Economics》等国内外主流学术期刊。主持国家自然科学基金，中国期货业协会研究课题，广州期货交易所、郑商所研究所对外合作课题等科研基金。担任中国运筹学会金融工程与金融风险管理分会常务理事等。

蔡宁

Ning Cai is currently professor and thrust head of the Thrust of Financial Technology at the Hong Kong University of Science and Technology (Guangzhou) (HKUST(GZ)). Previously, he taught at HKUST as assistant professor, associate professor, and professor sequentially. He received both MS and PhD at Columbia University and both BS and MS at Peking University. His research interests include FinTech, financial engineering, applied probability, and stochastic modeling. He serves as associate editor or editorial board member of seven international scholarly journals, including Operations Research, Operations Research Letters, Stochastic Models, and Digital Finance.

唐国豪

经济学博士（金融学专业），圣路易斯华盛顿大学访问学者，现任湖南大学金融与统计学院副教授、博士生导师，金融工程系副主任，金融与统计学院数字金融研究中心主任，中国优选法统筹法量化金融分会理事，宏观经济大数据挖掘与应用湖南省重点实验室研究员。主持国家自然科学基金、湖南省自然科学基金青年项目，获评湖湘青年英才。主要从事金融科技与金融机器学习、中国特色的实证资产定价研究。目前已在 Journal of Financial and Quantitative Analysis, Journal of Banking & Finance, Journal of Economic Dynamics & Control，和《管理科学学报》《金融研究》《经济学（季刊）》《经济学动态》等国内外重要期刊发表论文。智库服务研究获得国务院副总理、湖南省政协主席、湖南省常务副省长批示。获得多项省级、校级教学比赛荣誉。

陈媛媛

南京大学准聘助理教授，特聘研究员。中国科学技术大学数学与应用数学专业理学硕士、香港中文大学系统工程与工程管理系博士，毕业后曾于新加坡国立大学风险管理研究所担任博士后研究员。主要研究方向为动态投资策略模型与金融市场微观结构，相关研究结果发表于 Journal of economic dynamics and control, Mathematical finance 等金融工程方向主流期刊。现主持国家自然科学基金青年项目 1 项。

高昊宇

中国人民大学财政金融学院教授，博士生导师，国家优秀青年科学基金项目获得者、中国人民大学"杰出学者"青年学者，第 5 届中国科协"青年人才托举工程"入选人，博士毕业于中国科学院数学与系统科学研究院和香港城市大学。研究方向主要集中在银行与金融中介、金融风险管理、债务与信用市场和公司金融与中国资本市场等方面。代表性学术成果发表或接受发表在 The Journal of Finance (JF)、The Review of Financial Studies (RFS)、Journal of Financial Economics (JFE)、Journal of Financial and Quantitative Analysis (JFQA)、《金融研究》、《管理科学学报》、《世界经济》、《系统工程理论与实践》、《经济学季刊》等国内外金融管理领域权威刊物。他结题一项国家自然科学基金青年项目（后评估特优），主持一项国家自然科学基金面上项目。

许左权

先后于南开大学、北京大学、香港中文大学获得本科、硕士、博士学位，曾任英国牛津大学数学研究所野村金融数学研究员及牛津 Oxford-Man 研究所通讯研究员，现任教于香港理工大学应用数学系。其主要从事随机控制、优化及金融数学理论研究，多次受邀于世界著名学术机构及学术会议上作学术报告，主持多项国家自然科学基金及香港研究资助局项目。其主要学术成果发表在 Mathematical Finance，Operations Research，Annals of Applied Probability，Finance and Stochastics，SIAM Journal on Financial Mathematics，SIAM Journal on Control and Optimization，Mathematics of Operations 等著名国际学术期刊上。许博士曾参与组织过第十一届 Bachelier 金融协会全球大会等国际著名会议，现为 Mathematics of Operations Research，Digital Finance 等国际期刊编委。

杨招军

2000 年博士毕业于中南大学概率论与数理统计学科（数理金融方向），2002 年被湖南省人事厅和湖南大学评聘为教授。现为南方科技大学金融系研究员、副教授，博士生导师，中国优选法统筹法与经济数学研究会量化金融与保险分会副理事长，中国运筹学会金融工程与金融风险管理分会常务理事。他在《经济研究》、JEDC 等国内外学术杂志发表论文 180 余篇，当前主持国家自然科学基金重点项目一项。社会科学研究网站 SSRN (Social Science Research Network) 显示，他的作者排名为前 0.6%。最近研究领域包括: 资产证券化，金融契约理论，最优证券设计，薪酬设计，债务重组，金融机器学习，实物期权，信用担保等。

姜广鑫

哈尔滨工业大学经济与管理学院管理科学与工程系教授，国家级青年人才计划入选者。研究方向为随机模型与仿真、机器学习、金融工程与风险管理、金融科技等，多篇文章发表在管理领域著名期刊 Operations Research, INFORMS Journal on Computing, IEEE Transactions on Automatic Control, Naval Research Logistics 等。目前担任中国管理现代化研究会理事、中国管理现代化研究会风险管理专业委员会副秘书长，中国运筹学会金融工程与金融风险管理分会理事、副秘书长，中国信息经济学会理事，管理科学与工程学会理事、中国计算机学会（CCF）计算经济专业组执委，期刊 Asia-Pacific Journal of Operational Research 副编辑（Associate Editor）等职务。

宋颖达

上海交通大学安泰经济与管理学院副教授。本科毕业于清华大学数学系，博士毕业于香港科技大学工业工程及物流管理系。主要研究兴趣包括金融工程、金融科技、随机模型和仿真计算等，其研究成果发表在 Operations Research、INFORMS Journal on Computing、Mathematical Finance 等国际期刊上。

大会主旨报告

主旨报告一

题目： Central limit theorems for multi-armed bandit problems and Quantum Walks

报告人：陈增敬（山东大学）

摘要： This paper studies a multi-armed bandit problem where the decision-maker is loss averse, in particular she is risk averse in the domain of gains and risk loving in the domain of losses. The focus is on large horizons. Consequences of loss aversion for asymptotic (large horizon) properties are derived in a number of analytical results. The analysis is based on a new central limit theorem for a set of measures under which conditional variances can vary in a largely unstructured history-dependent way subject only to the restriction that they lie in a fixed interval

主旨报告二

题目： A Two Timescale Evolutionary Game Approach to Multi-Agent Learning and its Application in Algorithmic Collusion

报告人：陈南（香港中文大学）

摘要： We propose a two-time scale evolutionary game approach to solving multi-agent reinforcement learning (MARL) problems. Different from the existent literature that requires to solve Nash equilibrium strategies, exactly or approximately, in each period of learning, the new approach incorporates two innovative designs. First, we propose a simple perturbed best response protocol to update policies. This enables us to avoid the computationally expensive step of finding the exact equilibrium at each state. Second, we update Q-values and agent policies in two different time scales to ensure the convergence. The new approach provably converges to epsilon-Nash

equilibria of MARL problems without imposing the global optima or saddle point conditions, two restrictive assumptions that are typically needed in the literature.

AI-powered algorithms are now widely adopted in marketplaces to price goods and services. However, serious concerns have been raised by the regulators and academia about the possibility that these algorithms may learn to collude through their strategic interactions, even though they do not directly communicate with one another. Researchers predominately use Q-learning to model the behavior of pricing algorithms. With convergence guarantees, our approach provides an innovative framework for algorithmic collusion studies.

主旨报告三

题目： 基金管理行业发展及趋势分析

报告人：刘宇（恒生前海基金管理有限公司）

摘要： 简述境内外资产管理行业的发展，分析近年来驱动和影响基金管理行业的一些重要趋势和因素，阐述对行业的影响以及带来的发展机遇。

大会特邀报告

特邀报告一

题目： Extrapolation beyond Peers: An Asset Pricing Perspective

报告人：唐国豪（湖南大学）

摘要： Investors subject to extrapolative expectations may form biased beliefs in the cross-section. We propose a new mispricing proxy, which can be measured using peer measure-based valuation benchmark, to quantify the firm-level biases in investors' beliefs. We demonstrate that this measure has great cross-sectional impacts on stock returns. Stocks expected to have high performance according to our measure exhibit a predictable high return in the following month. The positive predictability is not driven by well-known return predictors, and it remains signif icant even after accounting for rational explanations. We then show that the predictive power is strong among firms exhibiting a high degree of extrapolation and during periods character ized by high extrapolation. Additional analysis suggests that the measure captures investors' inclination to extrapolate recent positive news and upper price limit-hitting events.

特邀报告二

题目： Optimal dividend payout with path-dependent constraint

报告人：许左权（香港理工大学）

摘要： We study a dividend payout problem under Brownian motion. The dividend payout must be non-decreasing over time and is subject to an upper bound constraint. Finding the optimal dividend payout strategy in this model is a long-standing open problem in risk theory. To overcome the difficulty, we first introduce a regime-switching problem – a sequence of single-obstacle problems in ODE–to approximate the original two-dimensional HJB equation and then take limit. We find a smooth switching boundary and the optimal strategy is given by the boundary.

特邀报告三

题目： The new timing of debt renegotiations

报告人：杨招军(南方科技大学)

摘要： Debt renegotiations are popular in practice; a key problem is how to specify their renegotiation time. We provide a new method to address the timing of debt renegotiations with the patterns of debt-equity swap, strategic debt service and distressed exchange respectively. We incorporate credible threats into debt renegotiations instead of non-credible threats implicit in much of previous literature. Our method derives that optimal renegotiation thresholds in the three renegotiation patterns are the common bankruptcy thresholds, which are less than the previous derived corresponding thresholds. Our method brings a higher optimal bond coupon rate and a much higher firm value than the previous studies. We produce analytical proofs for most of these conclusions.

特邀报告四

题目： Teaching Economics to Machines

报告人：刘彦初（中山大学）

摘要： Structural models in economics can offer appealing insights but often suffer from a poor fit with the data. In contrast, machine learning models offer rich flexibility but tend to suffer from over-fitting. We propose a novel framework that incorporates useful economic restrictions from a structural model into a machine learning model through transfer learning. The core idea is to construct a neural-network representation of the structural model in the source domain using simulated data generated by the latter, and then update the network in the target domain using real data. In an example application to option pricing, our hybrid model significantly outperforms both the structural model and a conventional deep-learning model. The out-performance of the hybrid model is more significant when the sample size of real data is limited or when the market condition fluctuates.

特邀报告五

题目： Computation of Intra-Horizon Risk Measures for Models with Stochastic Volatility and Jumps

报告人：宋颖达（上海交通大学）

摘要： We propose a unified framework for computing intra-horizon risk measures in models with both stochastic volatility and jumps. We derive analytical formulae for approximating both intra-horizon VaR (iVaR) and intra-horizon expected shortfall (iES), and establish the rate of convergence for the approximation errors. In addition, we design an enhanced algorithm to further improve the efficiency of our method. Empirical results demonstrate the importance of considering stochastic volatility for accurate intra-horizon risk assessment.

特邀报告六

题目： How does the Introduction of Hidden Orders Affect Limit Order Markets?

报告人：陈媛媛（南京大学）

摘要： Hidden orders are widely used in major exchanges. This paper studies how hidden orders affect markets by introducing these orders to the limit order market model in Foucault et al.(2005). We investigate the equilibrium outcomes in an infinite-time horizon model with multiple price levels and unknown hidden order queues by extending the algorithms in Pakes and McGuire (2001). The model suggests that the introduction of hidden orders (including the hidden limit orders and the midpoint peg orders) increases the profit of patient traders, slightly worsens impatient traders' average executed market prices, mitigates price impact by reducing both the effective spread and the Amihud illiquidity measure, and decreases the mid-quote volatility.

特邀报告七

题目：Data Collection and Machine Learning with Privacy Preservation

报告人：蔡宁（香港科技大学）

摘要：Data contain valuable information that could play important roles in decision making, but many data are sensitive in areas such as finance, economics, and life science. How to collect and analyze data while still protecting individual privacy has attracted increasing attention from researchers, practitioners, and policymakers. We propose a privacy-preserving data collection algorithm that allows a central administration to collect the data set while still preserving individual privacy. Moreover, we demonstrate the applications of our algorithm to machine learning.

特邀报告八

题目：Multi-Period Mean-Variance Portfolio Selection: An MDP Approach

报告人：夏俐（中山大学）

摘要：Mean-variance optimization is a fundamental problem in portfolio selection, which encounters significant challenges in the scenario of multi-period, caused by the failure of dynamic programming. Li&Ng(2000) and Zhou&Li(2000) developed an embedding method to treat this problem and derived elegant results with closed-form solutions, from the perspective of stochastic control. As Markov decision process (MDP) is a more general methodology for handling stochastic dynamic decision-making, there are also research streams in risk-sensitive MDPs, but it seems that they never merged with the research line of mean-variance portfolio selection from stochastic control. This talk aims to bridge this gap and proposes an MDP approach to handle this classical problem. Our research results show that the risk-sensitive MDP method obtains the exactly same results as stochastic control, and it can further bring a much broader and unified framework.

特邀报告九

题目： Extended Dynamic Programming Principle and Applications to Time-Inconsistent Control

报告人： 徐玉红（苏州大学）

摘要： This talk investigates an extended dynamic programming principle for a general stochastic control problem in which the state processes are described by a forward-backward stochastic differential equation. A multidimensional DPP is established with auxiliary dimensions defined by a BSDE. Consequently, an extended Hamilton-Jacobi-Bellman (HJB) equation is derived. The existence and uniqueness of smooth solution and a new type of viscosity solution are investigated for this extended HJB equation.Compared to extant research on the stochastic maximum principle, the present work is the first normal work on the partial differential equation method for the controlled FBSDE system. Interestingly, our model provides time-consistent solution for general time-inconsistent control problems associated with the traditional mean-variance model, risk-sensitive control and utility optimization for narrow framing investor, among others.

特邀报告十

题目： Data-Pooling for Personalized Intervention in Healthcare

报告人： 陈昕韫（香港中文大学（深圳））

摘要： Motivated by the emerging needs of personalized preventative intervention in many healthcare applications, we consider a multi-stage, dynamic decision-making problem in the online setting with unknown model parameters. To deal with the pervasive issue of small sample size in personalized planning, we develop a novel data-pooling reinforcement learning (RL) algorithm based on a general perturbed value iteration framework. Our algorithm adaptively pools historical data, with three main innovations: (i) the weight of pooling ties directly to the performance of decision (measured by regret) as opposed to estimation accuracy in conventional methods; (ii) no parametric assumptions are needed between historical and current data; and (iii) requiring data-sharing only via aggregate statistics, as opposed to patient-level data. Our data-pooling algorithm framework applies to a variety of popular RL algorithms, and we establish a theoretical performance guarantee showing that our pooling version achieves a regret bound strictly smaller than that of the no-pooling counterpart. We substantiate the theoretical development with empirically better performance of our algorithm via a case study in the context of post-discharge intervention to prevent unplanned readmissions, generating practical insights for healthcare management. In particular, our algorithm alleviates privacy concerns about sharing health data, which opens the door for individual organizations to levering public datasets or published studies to better manage their own patients.

特邀报告十一

题目： Adaptive Importance Sampling for Efficient Stochastic Root Finding and Quantile Estimation

报告人：姜广鑫（哈尔滨工业大学）

摘要： In solving simulation-based stochastic root-finding or optimization problems that involve rare events, such as in extreme quantile estimation, running crude Monte Carlo can be prohibitively inefficient. To address this issue, importance sampling can be employed to drive down the sampling error to a desirable level. However, selecting a good importance sampler requires knowledge of the solution to the problem at hand, which is the goal to begin with and thus forms a circular challenge. We investigate the use of adaptive importance sampling to untie this circularity. Our procedure sequentially updates the importance sampler to reach the optimal sampler and the optimal solution simultaneously, and can be embedded in both sample average approximation and stochastic approximation-type algorithms. Our theoretical analysis establishes strong consistency and asymptotic normality of the resulting estimators. We also demonstrate, via a minimax perspective, the key role of using adaptivity in controlling asymptotic errors. Finally, we illustrate the effectiveness of our approach via numerical experiments.

特邀报告十二

题目： Pricing the Priceless: The Cost of Biodiversity Preservation

报告人：高昊宇（中国人民大学）

摘要： Biodiversity loss is a crucial concern that demands a transition from current practices, which is anticipated to come at a substantial economic expense. However, how such a transition is priced in the financial markets remains unclear. In this paper, we aim to explore the impact of the "Green Shield Action" - a regulation change geared towards preserving biodiversity in nature reserves - on the local public financing costs in China. In a causal context, we show that this transition increases the municipal corporate bond yield by around 24 basis points. Employing precise geographic information and government procurement records, we emphasize the significance of transition costs as a pivotal mechanism. We find that the effects can be attributed to the transition pressure resulting from pre-existing human activities within nature reserves, and public spending related to biodiversity demonstrates notable growth following the reform. This paper provides a reference for addressing the financing gap in biodiversity conservation efforts and offers valuable insights for future regulatory interventions to counteract the declining trend of biodiversity.

青年学者最佳论文

题目： Bond pricing under sticky CIR process

报告人：张颢严（中国民航大学）

摘要： This talk documents the conditional characteristic function and bond pricing under the sticky Cox-Ingersoll-Ross (CIR) process. By introducing a time-change symmetric local time, we derive the sticky CIR process from the standard CIR process, and then prove the existence and uniqueness of the solution. For studying the conditional characteristic function of the sticky CIR process, we solve an equation concerned with the infinitesimal generator and its domain. In a similar way, we handle with its application in bond pricing by applying sharpe ratio. All the results we get are closed forms. An interesting phenomenon shows that the bond price will increase when the sticky point exists.

题目： A Simulation-Based Method for Estimating Systemic Risk Measures

报告人：周羿（中国科学技术大学）

摘要： This paper focuses on simulation-based approaches for estimating systemic risk measures. In particular, we provide the asymptotic forms of the relative errors for widely used systemic risk measures including conditional value-at-risk (CoVaR), coexpected shortfall (CoES) and marginal expected shortfall (MES). Based on asymptotic expansions, a general framework is provided for the simulation of systemic risk measures. The numerical results show that the proposed simulation framework works well, and it is more user-friendly, easier to expand and less time-consuming than simulation approaches using the resampling method and importance sampling.

题目： Risk-Sensitive Markov Decision Processes with Long-Run CVaR Criterion

报告人：张璐瑶（中山大学）

摘要： CVaR (Conditional value at risk) is a risk metric widely used in finance. However, dynamically optimizing CVaR is difficult, because it is not a standard Markov decision process (MDP) and the principle of dynamic programming fails. In this paper, we study the infinite-horizon discrete-time MDP with a long-run CVaR criterion, from the view of sensitivity-based optimization. By introducing a pseudo- CVaR metric, we reformulate the problem as a bilevel MDP model and derive a CVaR difference formula that quantifies the difference of long-run CVaR under any two policies. The optimality of deterministic policies is derived. We obtain a so-called Bellman local optimality equation for CVaR, which is a necessary and sufficient condition for locally optimal policies and only necessary for globally optimal policies. A CVaR derivative formula is also derived for providing more sensitivity information. Then we develop a policy iteration type algorithm to efficiently optimize CVaR, which is shown to converge to a local optimum in mixed policy space. Furthermore, based on the sensitivity analysis of our bilevel MDP formulation and critical points, we develop a globally optimal algorithm. The piecewise linearity and segment convexity of the optimal pseudo-CVaR function are also established. Our main results and algorithms are further extended to optimize the mean and CVaR simultaneously. Finally, we conduct numerical experiments relating to portfolio management to demonstrate the main results. Our work sheds light on dynamically optimizing CVaR from a sensitivity viewpoint.

题目：Integrating Information Implied by Option Prices, Market Portfolio and Historical Data in Portfolio Selection

报告人：王时坤（中山大学）

摘要：In this paper, we develop a robust estimation for expected returns combining forward-looking information implied by real-time asset prices and backward-looking information implied by historical data. Considering a general heterogeneous market composed of both informed investors and noise investors, we investigate the market equilibrium characterized by the expected returns, risk-neutral moments and market portfolio without making strict assumptions on the specific form of return distribution of assets and utility function of investors. To mitigate the negative impact of the market noise on the forward-looking information implied in market equilibrium, we then incorporate historical returns and propose the combined estimation for expected return within a Bayesian framework. The combined estimation is adaptive to the market composition and adjustable to changes in market states. Monte Carlo simulations and empirical studies are performed to validate the merits of the proposed approach.

题目：An Efficient and Provable Sequential Quadratic Programming Method for American and Swing Option Pricing

报告人：沈金叶（西南财经大学）

摘要：A sequential quadratic programming numerical method is proposed for American option pricingbased on the variational inequality formulation. The variational inequality is discretized using the θ-method in time and the finite element method in space.The resulting system of algebraic inequalities at each time step is solved through a sequence of box-constrained quadratic programming problems, with the latter being solved by a globally and quadratically convergent, large-scale suitable reflective Newton method. It is proved that the sequence of quadratic programming problems converges with a constant rate under a mild condition on the time step size. The method is general in solving the variational inequalities for the option pricing with many styles of optimal stopping and complex underlying asset models. In particular, swing options and stochastic volatility and jump diffusion models are studied. Numerical examples are presented to confirm the effectiveness of the method.

题目： A FAST Method for Nested Estimation

报告人：梁果（中国人民大学）

摘要： Nested estimation involves estimating an expectation of a function of a conditional expectation, and has many important applications in operations research and machine learning. Nested simulation is a classic approach to this estimation, and the convergence rate of the mean square error (MSE) of nested simulation estimators is only of order $\Gamma^{-2/3}$, where Γ is the simulation budget. To accelerate the convergence, in this paper, we establish a FAST method for nested estimation, and a unified theoretical analysis for general functions in the nested estimation shows that the MSE of the proposed method converges at the faster rate of $\Gamma^{-4/5}$, or even $\Gamma^{-6/7}$. We also provide an efficient algorithm that ensures the estimator's MSE decays at its optimal rate in practice. In numerical experiments, we apply the proposed estimator in portfolio risk measurement and Bayesian experimental design in operations research and machine learning areas, respectively, and numerical results are consistent with the theory presented.

题目： Contrarian Bets in Order Imbalance

报告人：朱红兵（河海大学）

摘要： Motivated by order imbalance capturing investors' trading intentions, we identify the contrarian bets in the firm's aggregate order imbalance using a comprehensive sample of U.S. data from 2007 to 2021. We show that contrarian gambling-related order imbalance can explain cross-sectional variation in returns. A long-short strategy based on this effect yields monthly alpha of 105.70 basis points. We explore potential explanations for this effect in terms of retailer order flow, trading volume, and price pressure. Our evidence broadly supports a price pressure channel, which is likely related to the extrapolation of rational investors against irrational investors' gambling trading behavior.

分组报告

分组报告（一）：金融优化前沿理论与算法
主持人：Tian Boshi（湖南大学）

题目： Robust optimized certainty equivalents and quantiles for loss positions with distribution uncertainty

报告人：田德建（中国矿业大学）

摘要： The paper investigates the robust optimized certainty equivalents and analyzes the relevant properties of them as risk measures for loss positions with distribution uncertainty. On this basis, the robust generalized quantiles are proposed and discussed. The robust expectiles with two specific penalization functions ϕ_1 and ϕ_2 are further considered respectively. The robust expectiles with ϕ_1 are proved to be coherent risk measures, and the dual representation theorems are established. In addition, the effect of penalization functions on the robust expectiles and its comparison with expectiles are examined and simulated numerically.

题目： Credit guarantee and coordination for a capital constraint supply chain with risk-averse agents

报告人：田博士（湖南大学）

摘要： In recent years, credit guarantees have received attention as an effective scheme for supply chain financing. However, there is a lack of comprehensive exploration into the impact of risk aversion attitudes on credit guarantee decisions. To address this gap, we apply conditional value-at-risk (CVaR) to characterize the effect of risk-averse attitudes on supply chain decisions with a credit guarantee and endogenous bank financing. Our study reveals that risk-averse supply chain agents tend to adopt more cautious strategies when provided with a credit guarantee. Additionally, we define risk-averse supply chain coordination using Pareto optimality, obtaining the risk-averse level and optimal order quantity for the entire supply chain. It is worth mentioning that the trends in optimal order quantity variations with the guarantee coefficient are influenced by the relative risk-averse levels exhibited by banks and suppliers. We then design the guarantee coefficient to efficiently coordinate capital constraints and risk-averse supply chains, provided that the retailer has enough confidence to manage the risk. Subsequently, we validated the coordination sensitivity through numerical experiments.

题目： Evaluation Timing with Dynamic Information: Optimization and Heuristic

报告人：Zhang Tingting（苏州大学）

摘要： Product evaluation is an essential business process, and digital innovation has made it possible for companies to immediately process available information. We develop a model where a company continuously assesses information that follows a doubly stochastic Poisson process with a mean-reverting and stochastic intensity. Accordingly, the company faces a two-dimensional optimal stopping problem in which the company continues to evaluate the product if and only if the product reputation and information intensity remain in a continu- ation set. We employ a probabilistic approach to prove that the continuation set takes the form of an open interval for any fixed information arrival intensity. Given the complicated nature of the optimal solutions, we develop an asymptotic expansive solution, and numerical studies show that our solution performs well. We also analyze a heuristic solution where the company substitutes the dynamic intensity with a constant intensity. Interestingly, we find that this heuristic company does not necessarily benefit from having a higher product reputation.

题目： A robo-advisor system: expected utility modeling via pairwise comparisons

报告人：陈博（西安交通大学）

摘要： We introduce a robo-advisor system that recommends customized investment portfolios to users using an expected utility model elicited from pairwise comparison questionnaires. The robo-advisor system comprises three fundamental components. First, we employ a static preference questionnaire approach to generate questionnaires consisting of pairwise item comparisons. Next, we design three optimization-based preference elicitation approaches to estimate the nominal utility function pessimistically, optimistically, and without bias. Finally, we compute portfolios based on the nominal utility using an expected utility maximization optimization model. We conduct a series of numerical tests on a simulated user and three real users to evaluate the efficiency of the proposed model.

题目： 我国商业银行影子银行业务与系统性风险研究——基于银行动态关联网络视角

报告人：潘弘杰（宁波大学）

摘要： 防止影子银行风险卷土重来，守住不发生系统性风险的底线是推进我国现代化金融体系建设的关键。基于2018年31家上市商业银行及其理财产品代表的影子银行业务数据，构建考虑影子银行业务的银行动态关联网络系统模型对影子银行业务与系统性风险间的关系进行实证分析和进一步模拟研究。结果表明：商业银行影子银行业务确实会提升系统性风险；影子银行业务短期内具有风险承担作用，但长期则会增加银行违约，降低银行存活率，加重中央银行的援助负担并提高风险水平；影子银行业务类型对系统性风险的影响具有一致性，业务规模增大会显著加深风险的波动程度；合理规模的影子银行业务有助于缓解突发事件导致的较小程度的资产损失冲击，但当资产损失冲击过大时，影子银行业务就会转变为风险传染的助推器，导致系统性风险增加，系统稳定性失衡。以上发现为维护我国金融市场稳定，深化金融监管体制改革和防范系统性风险提供了理论支持和有效借鉴。

题目： 关联网络重构与系统性风险监管：一个最优化视角

报告人：曹杰（长沙理工大学）

摘要： 党的十九大报告提出要"牢牢守住不发生系统性金融风险的底线"。因此如何增强金融系统的稳定性成为金融监管的重要话题。本文提出通过网络结构优化的方法降低机构的系统性风险大小。首先，本文利用非线性优化方法，考察金融机构的基本面条件不变的情况下，金融机构间的最优关联网络拓扑结构。其次，通过对比优化前后机构风险的大小，研究了机构风险降低的途径。最后，利用网络模拟验证了本文方法的稳健性。本文从关联网络优化的视角研究了系统性风险的监管，在不改变机构财务指标的前提下，降低了金融系统的脆弱性，丰富了当前的系统性风险审慎监管的途径。

题目： 地方政府隐性债务与银行体系系统性风险——基于地方融资平台视角的研究

报告人：李舒娴（中山大学）

摘要： 本文基于2021年我国三千余家地方融资平台的有息债务明细和 60 家主要银行年度报告数据，综合风险来源和风险放大传染机制，分别从债务总量、经济行业与经济区域层面对我国地方政府债务可能导致的银行体系系统性风险的测度与评估进行建模。在不考虑任何救助干预措施的情形下进行情景分析和压力测试的结果表明：当前，单独从地方政府隐性债务（融资平台贷款）可能的违约或者是显性债务（政府债券）可能的流动性危机来看，二者安全边界都比较宽，银行体系系统性风险发生的可能性不大。但如果二者同时出现问题，安全边界将大幅收窄，叠加银行体系网络的风险传染，较小的二重冲击即可引发重大损失。在各行业融资平台贷款中，租赁与商务服务业的风险敞口最大，且与房地产业关联度高，仅该行业的违约率升高即可触发银行体系系统性风险。从融资平台贷款的区域层面来看，西部地区违约率较高，东部地区风险敞口较大，在违约率基本相同的情况下，分地区融资平台贷款违约引发的系统性风险呈现"东高西低"特征，且东部地区隐性债务引发系统性风险的违约率安全边界较中西部较窄。

题目： 公募REITs能否成为系统性风险的"稳定器"？——基于多层信息网络视角

报告人：陈妍（长沙理工大学）

摘要： 金融产品创新对系统性风险既有抑制作用，也有促进作用。本文基于TVP-VAR模型构建多层信息溢出网络，结合溢出指数与区块模型分析新型投资工具——中国基础设施公募REITs与11个金融子市场之间的风险联动关系，从而探析公募REITs在系统性风险传播中的作用。研究发现：首先，公募REITs能有效分散投资组合风险，因为它们与大多数金融子市场的相关性和联动性较低。此外，原始股权投资者的回购比例会削弱公募REITs市场和利率市场之间的关联；其次，公募REITs市场在收益溢出和波动溢出方面都扮演了风险接受者的角色。进一步的，就区块之间的风险传染效应而言，公募REITs与黄金市场和货币市场处于"主受益板块"，接收来自其他区块的冲击；最后，公募REITs作为节点加入金融多层网络后，金融系统的总连通性降低、层间相似性削弱。这意味着C-REITs作为一种金融创新，对于金融市场的风险联动以及系统性风险的传播具有"稳定器"作用。

分组报告（三）：资本市场 I
主持人：周科（湖南大学）

题目：Stock Return Forecasting Based on Heterogeneous Graph Neural Network of Industrial chain

报告人：周科（湖南大学）

摘要：This research paper introduces a stock forecasting method using a time-series heterogeneous graph attention network (GRU-HAN) to model complex stock relationships via a diverse graph structure formed from technical and economic connections among industries. The method combines the Gated Recurrent Unit (GRU) and the Heterogeneous Graph Attention Network (HAN). The study's novelty lies in using a heterogeneous graph model to explore stock industry chain relationships and conducting empirical analysis within the Chinese A-share market. The results demonstrate strong performance in terms of investment efficiency and ranking effects. The GRU captures historical stock dynamics and price sequence features, while the HAN models relationships between upstream and downstream components of the industrial chain. Unlike existing deep learning-based stock prediction methods, this approach can create comprehensive heterogeneous graphs to represent stock relationships.

题目：A 股行业 ETF 对知情套期保值交易与市场效率的影响研究

报告人：刘晓群（海南大学）

摘要：行业 ETFs 是一种能促进知情交易和提高市场效率的低成本金融创新工具吗？本文结合中国金融市场融资融券与转融券制度，采用Huang et al.（2020）的方法界定每一个股票ETF所属的行业，以此构造行业ETF作为研究对象，从套期保值视角分析ETFs的资产定价问题，即考察中国金融市场中的知情交易者能否利用行业 ETFs 对冲行业风险，实现套期保值目的，并提高行业ETFs成分股股价信息含量，提升市场效率。研究发现：首先，在做多标的股票/做空行业ETF的交易策略下，当上市公司宣布正向盈余意外（Earnings Surprise）信息时，知情交易者会同时大幅增持此标的股票的多头和该股票所属行业ETF的卖空头寸，即行业ETFs可以促进知情交易者利用公司特定信息对冲行业风险，实现套期保值功能。其次，行业ETF 降低了其成分股的特质波动率和非流动性，即有助于知情交易者防范行业风险的行业ETF让投资者获取到公司特定信息所带来的收益，随后，股价将更充分的反映公司层面信息，由此提高了市场效率。本文研究对中国投资者精准利用行业ETF进行套期保值策略，政策制定者有效监管ETF市场，以及发行者设计更合理的ETF有重要的理论和现实意义。

题目： 媒体影响下的双层投资者行为传染模型研究

报告人：赵文婷（宁夏大学）

摘要： 为了讨论正负面媒体对股票市场中机构投资者和个人投资者投资行为的影响，本文将媒体作为与时间有关的状态变量，构建媒体影响下的双层投资者行为传染模型. 证明模型正解的存在有界性，推导模型的平衡点通过下一代矩阵法计算传染阈值. 利用 Routh-Hurwitz 准则证明了模型非零平衡点的局部渐近稳定性. 通过数值模拟验证了股票市场中投资者行为传染在一定条件下趋于稳定状态，对传染阈值进行敏感性分析，发现媒体的耗散率和正负面媒体的报道强度会影响投资者的投资行为.

题目： 具有较大波动的资产价格预测：以比特币为例

报告人：陆智超（苏州大学）

摘要： Bitcoin is the world's largest cryptocurrency by market capitalization with extremely volatile price movements, making its price prediction a key challenge to investors and policy makers around the world. This paper proposes a new hybrid model to provide more reliable forecasts for bitcoin price than existing methods. A highlight of this work is the application of multi-subpopulation marine predators algorithm, which is a nature-inspired metaheuristic, to strengthen parameter optimization. In data preprocessing, we decompose the original time series into several mode components by time varying filtering based empirical mode decomposition, to capture mixed patterns in data sequences and fully utilize hidden information for prediction. Then a deep learning model, deep extreme learning machine is used to enhance feature representation. Our experiments show that the proposed model outperforms other comparison models under various evaluation criteria, improving by approximately 18% in the common errors compared with extreme learning machine. Furthermore, the transaction strategy constructed by our hybrid model brings about 69.10% and 26.17% more profit in the back-testing of weekly prediction, respectively, than the buy-and-hold strategy and the moving average convergence divergence strategy.

分组报告（四）：供应链金融与金融优化 I
主持人：李启洋（福州大学）

题目： Timing of Multilateral Bargaining in a Dual-sourcing Structure Considering Supply Disruption

报告人：李启洋(福州大学)

摘要： We analyze the dynamics of multilateral bargaining in a supply chain consisting of a downstream buyer sourcing from two competing suppliers subject to supply disruption caused by financial instability. In the presence of supply disruption, the timing by which the buyer negotiates with the suppliers becomes crucial. This paper considers two orders of negotiation: simultaneous bargaining, where the buyer negotiates with both suppliers simultaneously, and sequential bargaining, where negotiations occur sequentially. We aim to understand which bargaining timing is better for both the buyer and the suppliers. Our analysis reveals that sequential bargaining provides a first-mover advantage to the first-negotiated supplier, potentially resulting in a significant reservation profit for the buyer when it takes a more powerful position relative to the suppliers during negotiations. Consequently, sequential bargaining is favored by the buyer when it holds greater bargaining power over the suppliers. In contrast, the first-negotiated supplier may be disadvantaged by sequential bargaining in such cases. Moreover, when the buyer's bargaining power is neither too small nor too large, we observe that the supply disruption risk and production costs can influence the preferred bargaining timing of the first-negotiated supplier. Notably, when the buyer's bargaining power is moderate, the impact of supply disruption risk takes precedence, causing the optimal bargaining timing for the first-negotiated supplier to switch twice: from simultaneous bargaining to sequential bargaining and then back to simultaneous bargaining. However, when the buyer's bargaining power is large, the role of production cost is highlighted. Specifically, we find that a low (high) production cost prompts the first-negotiated supplier's preferred bargaining timing to shift from simultaneous (sequential) bargaining to sequential (simultaneous) bargaining as the supply disruption risk increases.

题目： Lending to Third-party Sellers with Platform Loan

报告人：黄荣义（福州大学)

摘要： The large e-commerce platforms now not only provide a venue for the third-party sellers to sell their products but also provide financing services for them. In this paper, we study the impacts of such platform financing on the profits of a supply chain and the platform, as compared to the conventional supply chain financing where the supplier offers the seller trade credit. We develop a classical two-stage supply chain model, in which the end demand follows a downward sloping function and the market size is random. We identify the interest subsidizing role, the risk mitigation role and the risk isolation role that can empower platform financing to be a win-win strategy for the supply chain and the platform. Although platform financing has a cost markup disadvantage as compared to trade credit, it also has a revenue recover advantage. We find that as the cost markup disadvantage weakens, platform financing can first benefit the three parties for moderate market uncertainty by playing the risk mitigation role, then for low market uncertainty by playing the interest subsidizing role, and lastly for high market uncertainty by playing the risk isolation role. Moreover, if the platform can endogenize the interest rate, it may set the rate strictly below the risk-free interest rate for low and moderate market uncertainty to enable the interest subsidizing role and the risk mitigation role and strictly benefit all parties. Although it may set the rate above the risk-free interest rate for high market uncertainty, the risk isolation role can still make the three parties strictly better off than under trade credit. These insights are useful for understanding the performance and the design of platform financing.

题目：模糊信息下多关联企业多层级网络安全投资优化模型

报告人：许豪（湖南工商大学）

摘要：近年来, 为了应对信息技术飞速发展带来的网络安全风险, 不少企业开始尝试多元化安全防御策略, 力求获取充分网络安全保障。本文从企业各部门间、企业与企业间的多层级关联视角出发，在企业相关网络风险信息模糊下，充分考虑单个企业各部门间网络风险的关联性、企业与企业间网络风险的传染性。在构建企业多层级模糊信息投资决策模型的基础上，通过灵敏度分析的方法，对模型进行确定性转化，并设置一定的算法对上述多传染性企业信息安全投资策略模型进行求解。结果表明：基于灵敏度分析的方法得到，企业受到来自其他企业部门的传染风险损失的模糊信息最为重要，可适当收缩其模糊区间以提升模型的总体满意度，该方法为企业在模糊信息下制定信息投资策略提供了有效借鉴。另外，当企业受到来自其他企业部门的传染风险损失较大时，企业应设置合理的模糊区间及财富效用目标以保持 总体满意度与模型适应性的平衡。最后，企业制定适当的网络安全目标能有效抑制网络风险的恶化，减少企业间的进一步逐利行为，使市场维持可接受水平下的稳定均衡。为此，企业应合理规划其财富效用目标，实现市场共赢。

题目：Doing Well by Doing Good: Interest Rate Determination for Unsecured Personal Loans

报告人：阳宗灏（香港城市大学）

摘要：Unsecured personal loans play a valuable role in enhancing financial inclusion. The interest rate is perhaps the most important aspect of a loan, which should offer borrowers a fair cost of capital usage and compensate lenders for taking default risk. In practice, interest rates are often set inefficiently. We evaluate over one million unsecured personal loans on LendingClub. We find mismatches between interest rates and risk, leading to a significant gap in the probability of being funded between prime and subprime borrowers and biased interest rates against African Americans. This paper proposes a pricing method based on the rationale that loans should provide the same risk-return tradeoff. Interest rates assigned by our method can effectively narrow the gap in access to credit for subprime borrowers and address the racial bias problem. Online lending platforms also do well by doing good - The loan volume is expected to increase by 15.5%.

题目： Systematic Risk: Black-box CoVaR Estimation and Sensitivity Analysis

报告人：曹昊（复旦大学）

摘要： CoVaR is an important measure of financial systemic risks. Due to the complex structures and dependence of financial portfolios, estimating the CoVaR of portfolio losses as well as its gradient information could be very challenging, especially in a black-box setting, where only noisy estimates of losses are available. For CoVaR estimation and sensitivity analysis, we propose a stochastic approximation algorithm that is applicable in various complicated cases, including black-box and high-frequency data scenarios. We establish the strong consistency and rate of convergence of the algorithm under appropriate technical conditions. The optimal rates of convergence of our proposed CoVaR and its gradient estimators are of orders $O(n^{-12})$ and $O(n^{-13})$, respectively, where n denotes the number of algorithm iterations. Simulation experiments support our theoretical conclusion.

题目： Black-box optimization with simultaneous statistical inference

报告人：练腾（复旦大学）

摘要： Black-box optimization serves as a highly valuable tool for complex systems, because in many applications an appropriate mathematical model may be unknown, imprecise, or computationally expensive to evaluate. In financial engineering, there are many problems concerning about not only optimization, but also the statistical inference for the system's performance. We present an online algorithm to simultaneously address the dual tasks of optimization and statistical inference. The algorithm inherits the rate of convergence of stochastic approximation for optimization, and furthermore it provides a normalized estimator that adheres to the central limit theorem.

题目： Optimal Attention Allocation: Picking Alpha or Betting on Beta?

报告人：顾祖瑶（华东师范大学）

摘要： Attention is a scarce cognitive resource that affects the investor's learning and decision-making. This paper investigates the problem of attention allocation and portfolio selection with information capacity constraint and return predictability in a multi-asset framework. We show that the investor's optimal attention strategy should be the maximization of the combined expected alpha payoffs and expected beta payoffs from the portfolio. Return predictors taking extreme values motivate the investor to learn about them and this leads to a competition among multiple information sources for attracting attention. With information acquisition, the investor trades with varying skills including picking alphas and betting on beta, depending on the deviations of the related return predictors.

题目： 企业动态创新决策与政府补贴

报告人：李凌云（西南财经大学）

摘要： 创新活动具有高风险和高外部性，这使得创新投入通常低于市场最优。创新是推动经济结构调整和生产率增长的主要因素。创新补贴是我国政府常用的激励企业进行自主创新的政策手段。因此，本文构建了一个多期的企业创新动态决策模型来刻画企业创新路径的选择。模型引入政府补贴机制，分析政府补贴对企业创新决策的影响。研究发现，政府补贴能够激励企业进行创新投入，并且政府补贴越多，企业创新投入时长越长。相比于政府一次性给予企业补贴的行为，政府通过多期给以企业补贴更能够激励企业进行创新投入。最后，普适性的补贴策略会出现企业的道德风险问题，当政府支付成本购买信号能够实行严格的补贴策略时，就完全规避道德风险问题。

分组报告（六）：公司金融 I
主持人：任幸子（首都经济贸易大学）

题目： 注册制改革会降低股权融资成本吗？基于创业板的溢出效应研究

报告人：胡磊（湖南工商大学）

摘要： 基于2016-2022年创业板和主板上市公司的面板数据探究创业板试点注册制产生的溢出效应。研究发现，在创业板试点注册制改革后，板块内已上市企业的股权融资成本得到显著降低。机制分析表明，这一溢出效应主要通过提高股票流动性及信息披露水平来实现。同时将自愿信息披露纳入强制披露的补充机制，进一步研究发现注册制改革提高了公司自愿披露质量，具体表现在提升披露社会责任的意愿、增加披露业绩预告的准确度。异质性分析表明，在分析师关注度低、融资约束高和民营企业中，注册制改革降低股权融资成本的效果更加显著。本文验证了注册制对存量公司具有溢出作用，不仅为注册制改革政策效果的全面评估提供了支持，还揭示了注册制具有优化金融市场资源配置的作用。

题目： 供应链关系与企业并购行为

报告人：樊晓霞（海南大学）

摘要： 并购行为是企业成长过程中关于内生有机成长方式和外生并购成长方式的相机抉择问题，供应链关系的构建是企业获取内生成长的方式。文章基于2008——2022年沪深 A 股上市公司的经验数据研究供应链关系对企业并购行为的影响，实证研究发现：（1）供应商集中度和客户集中度都显著降低了企业并购战略选择和并购规模；客户集中度显著减弱企业的并购依赖程度，而供应商集中度与企业并购依赖的关系不存在显著相关性；（2）企业相对于供应商的议价能力越强，企业并购战略选择的倾向性越大并且并购规模越大，而企业并购依赖程度越小；企业相对于客户的议价能力越强，企业并购战略选择的倾向性越小并且并购规模越小，同时企业并购依赖程度越小。上述研究结论经过一系列稳健性检验依然成立。本文创新性地从供应链的关系特征角度研究企业并购行为，有助于企业在并购实践中做出更加准确的战略决策。

题目： Female Directors and CSR: Does the Presence of Female Directors Affect CSR Focus?

报告人：任幸子（首都经济贸易大学）

摘要： Using a sample of Chinese firms from 2007 to 2021, this study unravels the distinct influence of female directorship on corporate social responsibility (CSR) activities. We show a strong correlation between female directors and an enhancement in overall and particularly, internal CSR engagement. The relationship between female presentation on board and external CSR is negative but not significant. The findings are robust to alternative model specifications, proxies for CSR, reverse causality, and omitted variable concerns. We further find that societal expectations amplify the influence of female directors on CSR engagement, reaffirming our hypothesis that social expectations shape female director decision-making processes and hence firm CSR activity. Moreover, we find that when female directors constitute a critical mass and are backed by women in executive roles, their impact on bolstering internal CSR initiatives significantly intensifies. Among these female directors, the independent and monitoring directors distinctly stand out, playing pivotal roles in guiding the focus towards internal CSR. Overall, our results suggest that female directors are crucial in promoting firm CSR, especially internal CSR.

题目： Non-financial Institutional Blockholder, Exit Threats, and Firms CSR Performance

报告人：任幸子（首都经济贸易大学）

摘要： This study investigates the influence of blockholders on corporate social responsibility (CSR) by analyzing unique panel data of A-share listed companies in China from 2006 to 2018. The findings highlight that non-financial blockholders significantly bolster CSR, whereas the impact of their financial counterparts is insignificant. The study further identifies stock liquidity as a significant moderator in the relationship between blockholders and CSR. This suggests that a credible threat of exit serves as a mechanism through which non-financial blockholders can influence CSR. These empirical findings hold true even after addressing endogeneity concerns through various measures such as the exogenous shock, Propensity Score Matching-Difference in Differences (PSM-DID) model, multi-dimensional fixed effects model, and Change Regression.

分组报告（七）：绿色金融
主持人：谭英贤（江西财经大学）

题目："双碳"目标下机构投资者支持绿色创新研究——来自中证 800/1000 指数断点回归的证据

报告人：徐泽林（福州大学）

摘要：基于 2014 至 2019 年间中证 800 指数和中证 1000 指数成份股定期调整的准自然实验，本文研究了机构股东支持上市公司绿色创新的作用机制，并通过采用断点回归方法显著缓解了机构持股与公司特征之间固有的内生性问题。研究发现，更高比例的公募基金持股能够促进上市公司绿色创新水平的提升，在作用机制方面，公募基金持股主要通过外部监督和资源配置支持上市公司绿色创新。进一步研究表明，公募 基金股东作为主要的"社会导向型"股东，有助于促进公司未来 ESG 总体表现和整体创新水平的提高。

题目： Green technology innovation with environmental constraints

报告人：谭英贤 (江西财经大学)

摘要： In this paper, we employ the real-option approach to investigate the impact of environmental constraints (regulations) on a firm's green technology innovation investment decisions. We discover that the relationship between the timing of green technology innovation and the intensity of environmental constraints follows a U-shaped pattern, which provides a potential explanation for the conflicting predictions on the relationship between green technology innovation and environmental constraints in the empirical findings. Critically, our findings suggest that there is an optimal level of environmental constraints, which can be chosen by the government to encourage firms to undertake green technology innovation investments sooner. Furthermore, we find that the effect of firm's business risk and debt financing on optimal environmental constraints is ambiguous.

题目：绿色金融政策怎样影响污染企业的产能利用率？

报告人：蔡兴（湖南师范大学）

摘要：有效化解产能过剩是中国深化供给侧改革的主要任务，也是实现经济高质量发展的内在要求与重要手段。绿色金融政策作为一种环境管制政策，通过影响污染企业行为，不仅能有效促进生产方式绿色转型，也会对企业产能利用率产生重要影响。本文基于 2012 至 2020 年中国沪深 A 股上市公司数据，以 2016 年《关于构建绿色金融体系的指导意见》的颁布为准自然实验，运用双重差分方法考察了绿色金融政策对污染企业产能利用率的影响。研究结果如下：（1）绿色金融政策的实施显著提高了污染企业的产能利用率，一系列稳健性检验均支持了这一结果。（2）机制检验结果显示，绿色金融政策会通过信贷资源配置机制纠正信息不完全、约束政府不当干预行为，抑制污染企业过度投资，进而提升其产能利用率。绿色金融政策还会激励污染企业技术创新，提升产品质量与差异化水平，更好地满足市场需求，进而提升企业产能利用率。（3）异质性分析表明，在国有企业、大规模企业和成立年限较长企业中，绿色金融政策对产能利用率产生更强的提升作用。本研究丰富与拓展了绿色金融政策效应以及环境管制与产能利用率关系的相关研究，为中国利用绿色金融政策化解产能过剩、推进高质量发展提供了有益参考。

题目：工业机器人应用对绿色全要素生产率的影响研究

报告人：黄蕾（湖南师范大学）

摘要：党的二十大进一步明确要推动绿色发展，促进人与自然和谐共生。随着人工智能驱动经济增长的定位日渐明确，工业机器人应用如何影响绿色发展，这一问题亟待回答。本文针对工业机器人对绿色全要素生产率的影响效应及其机制进行了探讨，基于 2003-2019 年 252 个地级市面板数据的实证分析发现：工业机器人应用显著提升了绿色全要素生产率，在工具变量缓解内生性后，结论依然稳健。中介效应的结果显示，工业机器人主要通过促进绿色创新和改善资本效率的传导路径提升绿色全要素生产率，机制的解释力接近总效应的 80。

题目： 股权分置改革下的权证市场是否实现了其本源功能？

报告人：俞乃畅（南京大学）

摘要： 我国曾经两次引入权证产品，但都遭到了投资者的疯狂爆炒，投机泡沫非常严重，大量新闻报道和学术研究都集中分析中国权证市场的泡沫问题。然而，权证作为股权分置改革对价的支付工具，本意是为了补偿流通股股东因非流通股份获得流通权而遭受的潜在损失，保护流通股股东的利益不受损害。那么，权证是否实现了其本源功能呢？本文使用公开市场交易数据和非公开的脱敏账户数据，实证研究流通股股东的财富在股权分置改革前后的变化，借此判断权证在股改中是维护还是损害了流通股股东的利益。研究结果表明，总体而言，流通股股东的财富在股改前后平均增值为15.07%，而且平均都能获得正的超额收益；在股改中获得权证作为对价的流通股股东，特别是对于那些在首次公告日之前就拥有股票的，绝大多数都能获得正的整体利润。总的来说，股权分置改革事件中权证的推出实现了补偿原有流通股股东利益的功能。

题目： Higher-order financial networks

报告人：赵龙峰（西北工业大学）

摘要： This paper investigates the role of high-order financial network structures in shaping financial market states and guiding portfolio optimization. Our analysis shows that the high-order interactions between financial assets have a significant impact on the stability and dynamics of financial markets and can be used as critical indicators for financial market states. Furthermore, we apply high-order network structure information to guide portfolio optimization and investment practices, demonstrating that it can improve asset allocation, mitigate systemic risk, and improve overall portfolio performance. Our findings highlight the importance of considering high-order interactions in financial network analysis when making investment decisions or assessing market conditions. By incorporating high-order network information into portfolio optimization, investors can better manage risk exposure and improve overall portfolio performance, leading to better outcomes for both investors and the broader economy.

题目： Inferring jump and volatility dynamics from the S&P 500 and VIX markets: Specification analysis

报告人：夏雯靖（中国科学技术大学）

摘要： This paper estimates a class of flexible non-affine models with time-varying jump risks using S&P 500 index returns and VIX term structure data, explores volatility dynamics, and analyzes the performance of the models. The findings suggest that square-root stochastic volatility models may not be adequate to capture the complex patterns in volatility dynamics. Instead, polynomial diffusion models provide a better fit for the volatility dynamics. Furthermore, the time-varying jump intensity and time-varying return jump variance are crucial components for accurately modeling volatility.

题目：公司违规是否能引发股票价格暴跌？ ——基于信息传播和信息隐藏视角的研究

报告人：陈杨超（南昌大学）

摘要： 在欧美市场成熟市场环境和公司治理模式下，公司违规发生后对公司治理和信息渠道的约束性作用明显，然而在中国新兴市场和弱公司治理模式下是否会有同样的现象存在？基于此，本文以2003-2020年沪深A股上市公司为样本，实证检验了公司违规对股价崩盘风险的影响和传导路径。研究发现，公司违规能显著加剧上市公司的股价崩盘风险，且在缓解内生性问题和进行多项稳健性检验后，结论依然成立；进一步分析发现，在私有企业、信息不对称程度较高和治理效应较差时，公司违规对股价崩盘风险的加剧作用更强；机制检验表明，违规行为通过信息传播和信息隐藏两条路径影响股价崩盘风险。进一步分析发现，投资者对不同类型不同程度的公司违规事件存在时间效应，短期而言，投资者关注会计违规和领导人违规，长期而言，投资者更在意经营违规。本文的结论对于减低股价崩盘风险、提高资源配置效率和保障投资者利益有着重要的理论和实践意义。

题目：行为金融下的房地产投资分析

报告人：宋兆烨（河北师范大学）

摘要： 金融更加注重投资者的非理性心理和行为对投资决策的影响。本文通过我国房地产行业机构投资者和个人投资者的非理性行为，对投资行为的影响进行了具体的说明。其次，通过对处在风口浪尖的恒大集团分析，进一步说明了行为金融视角下的非理性投资行为对房地产行业的影响。最后，通过由恒大集团困境得到的警示提出如何在行为金融视角下更好地开展投资行为。

题目：气候政策不确定性对全球能源价格和股票价格的动态影响研究

报告人：贺志芳（江南大学）

摘要：目前，全球面临气候变化的威胁。全球能源转型和金融化的快速推进使得气候政策不确定性对能源价格和股票价格产生了深远的影响。本文主要运用非线性和时变的格兰杰因果检验以及TVP-VAR方法研究深入分析了气候政策不确定性对全球能源价格和股票价格的动态影响。研究结果表明，气候政策不确定性变动是全球能源价格和股票价格变动的格兰杰因果原因，该因果关系在重大气候政策事件发生时更为显著。同时，全球能源价格和股票价格之间存在双向格兰杰因果关系，并且该双向因果关系在2008年金融危机发生后明显增强。在此基础上，运用TVP-VAR方法进一步发现，气候政策不确定性对全球能源价格和股票价格的影响呈现时变特性。具体而言，气候政策不确定性冲击对全球能源价格的短期影响显著为正，而中期和长期影响在2007年由负向转为正向。气候政策不确定性冲击对股票价格的影响在2012年之前基本为负，随后该影响表现为正。能源价格冲击对股票价格的负向影响在短期较为明显，且近年来该负向影响程度不断增强。

题目：基金经理的货币政策感知与基金风险承担

报告人：刘晓明（中国人民大学）

摘要：本研究基于基金的年报文本信息，使用文本分析方法构建了基金个体层面的货币政策感知测度，探究基金经理的货币政策感知与其风险承担之间的关系。实证研究发现，对货币政策感知更为积极的基金，会在未来一年显著地提高自身的风险承担水平。机制分析表明，基金的货币政策感知与风险承担之间的正向关系，主要是由基金所面临的市场层面与个体层面的业绩与资金流凸性关系所导致。渠道分析表明，对货币政策感知更为积极的基金，会在未来同时提升自身的系统性风险和异质性风险，主要体现在投资风格极端程度和跟踪误差的上升。此外，本研究对实际货币政策进行区分的结果表明，当未来实际货币政策更为宽松时，在年报未来展望内容中对货币政策感知更为积极的基金，将会进一步提升自身风险承担水平。

分组报告（九）：投资组合选择
主持人：韦佳昕（西安交通大学）

题目： International Portfolio Optimization with Chance Constraints
报告人：韦佳昕（西安交通大学）
摘要： In this paper, we study an international portfolio selection problem, which allocates wealth in different security markets. We built an international portfolio selection model with a chance constraint to guarantee the portfolio performance over a benchmark in a large probability. We use some market factors to explain the return rates of risky securities. We use a copula model to capture the nonlinear dependence structure of the factors and exchange rates. We design a new efficient algorithm based on partial sampling approximation and sequence convex approximation to solve the chance constrained international portfolio selection problem. Numerical tests in a practical international portfolio management problem illustrate the reasonability and superior out-of-sample performance of the proposed model.

题目： Learning mixture policies for online portfolio selection
报告人：沈佳瑜（西安交通大学）
摘要： This paper presents an innovative online portfolio selection model, situated within a meta-learning framework, that leverages a mixture policy learning strategy. The fundamental concept behind this approach is to dynamically choose appropriate classical strategies tailored to different market conditions. We employ a clustering method to identify a set of historically high-performing strategies, characterized by low similarity, as candidate policies. Subsequently, we employ a meta-learning algorithm to determine the optimal weights for these selected policies. Our proposed algorithm stands out for its efficiency in terms of training time and data requirements, making it particularly suitable for high-frequency algorithmic trading. To validate the effectiveness of our method, we conduct numerical tests on cross-training datasets, demonstrating its transferability and robustness.

题目： Optimal reinsurance contract and investment strategy for multiple competitive-cooperative insurers and a reinsurer

报告人：王韬（西安交通大学）

摘要： In this article, we consider a reinsurance contract design by taking into account the joint interests of multiple insurers and a reinsurer. The reinsurance contract consists of optimal reinsurance strategies and reinsurance prices. The former are chosen by the competitive-cooperative insurers and the latter are determined by a reinsurer. Both insurers and the reinsurer can invest in the common risk-free asset and one different risky asset. The optimal time-consistent reinsurance-investment strategies of the insurers and the optimal reinsurance prices and investment strategy of the reinsurer are derived analytically. Numerical experiments are carried out to illustrate the influences of model parameters on the optimal reinsurance contract and optimal investment strategies. We find that the establishment of the reinsurance contract is affected by the correlation between the claim sizes of insurers as well as that of claim numbers. The results reveal that competition and cooperation will lead to a decrease and increase of the reinsurance price, respectively, showing the importance of opting for cooperation among insurers. Both competition and cooperation are beneficial to insurers, especially for those with high risk aversion.

题目： Nonconcave optimal portfolio for participating insurance under mean-reverting asset returns

报告人：冯鋆（西南财经大学）

摘要： The optimal investment strategies for participating insurance are investigated. Suppose that the finanical market consists of a risk-free bond and a risky stock with mean-reverting return. There exists a unique pricing kernel in the complete finanical market. However, the lognormal distribution property of the pricing kernel is broken. The insurer possesses loss aversion preference and aims to maximize the expected utility of the terminal payoff. Since the utility function is nonconcave and the payoff structure is piecewise, the concavification technique is used to transfer the problem into concave version. In order to obtain the optimal portfolio, the terminal static optimization problem is solved. Meanwhile, the inverse Fourier transformation method is used to derive a semi-analytical solution of portfolio choice. Numerical examples are provided to illustrate the effect of the mean-reverting rate, the loss aversion degree, the guaranteed interest rate and the risk aversion parameters on the optimal portfolio and terminal wealth.

专题报告（十）：期权定价
主持人：卓小杨（北京理工大学）

题目： The Risk and Return Dynamics of Contingent Claim Portfolios

报告人：卓小杨（北京理工大学）

摘要： In this talk, we generalize the Equivalent Expectation Measures theory (see Nawalkha and Zhuo, 2022, JF) to obtain analytical solutions of the higher-order moments of contingent claim returns over a finite horizon date. We show that in order to obtain analytical solutions to these risk measures requires the construction of parallel financial markets, which are identical to the original financial market until the given horizon date, but all state variable processes in any parallel market evolve independently of all state variable processes in all other parallel markets after the horizon date. Using this framework, we propose a methodology to derive analytical solutions for variance, covariance, and higher-order moments of equity portfolios embedded with equity options, Treasury bond portfolios, and corporate bond portfolios under general affine models.

题目： Analytical solvability and exact simulation in models with affine stochastic volatility and Lévy jumps

报告人：蒋萍萍（苏州大学）

摘要： We investigate analytical solvability of models with affine stochastic volatility (SV) and Lévy jumps by deriving a unified formula for the conditional moment generating function of the log-asset price and providing the condition under which this new formula is explicit. The results lay a foundation for a range of valuation, calibration, and econometric problems. We then combine our theoretical results, the Hilbert transform method, various interpolation techniques, with the dimension reduction technique to propose unified simulation schemes for solvable models with affine SV and Lévy jumps. In contrast to traditional exact simulation methods, our approach is applicable to a broad class of models, maintains good accuracy, and enables efficient pricing of discretely monitored path-dependent derivatives. We analyze various sources of errors arising from the simulation approach and present error bounds. Finally, extensive numerical results demonstrate that our method is highly accurate, efficient, simple to implement, and widely applicable.

题目： VIX Option Pricing with Good and Bad

报告人：郭芝宇（北京大学）

摘要：This article studies VIX option pricing by directly modeling the dynamics of VIX based on realized semivariances. We use high-frequency data of VIX to compute the realized measures of volatility of VIX. Then we derive the closed-form pricing formula for the VIX options and evaluate the pricing performance of the proposed model. The empirical results show that the realized semivariance-based model provides superior pricing performance compared with the model based on conventional unsigned realized variance and the classic Heston–Nandi model, both in sample and out of the sample. Our study confirms that the decomposition of realized variance into upside and downside components helps to improve the VIX option pricing performance.

题目： An Analytical Approximation for Exchange Option Valuation in GARCH-type Model

报告人：徐光利（对外经济贸易大学）

摘要：In this paper, an analytical approximation formula based on the bivariate Edgeworth expansion for exchange options in GARCH-type models is derived. The proposed discrete-time option pricing model can integrate three frequently used linear GARCH process: GARCH, NGARCH and GJR-GARCH into one integrated framework. Analytical expressions for normal-integrals functions and product cumulants under different GARCH-type models are derived simultaneously, which are the critical steps in proposing the approximating price. Finally, numerical performances of the analytical approximation and Monte Carlo simulation in NGARCH and GJR-GARCH process are examined, showing that our pricing method enjoys higher computation efficiency.

分组报告（十一）：养老基金投资与风险管理
主持人：王佩（广东金融学院）

题目： Time-consistent investment and contribution adjustment strategies for a collective DC pension plan with stochastic salary under smooth ambiguity utility

报告人：赵慧（天津大学）

摘要： This paper studies the optimal investment and benefit adjustment problem for a collective DC (CDC) pension plan in an environment with parameter uncertainty. We propose a smooth ambiguity framework to model the pension trustee's preferences towards risk and ambiguity. Since the pension trustee is ambiguous about the risky assets, she/he decides to invest in a risk-free asset, a purely risky asset and an ambiguous risky asset whose return is uncertain. Furthermore, we take the stochastic salary into account. The objective is to maximize the expectation of the accumulated benefit payment and terminal wealth under a smooth ambiguity utility which is the double power form. The utility function makes the problem time-inconsistent and we establish the extended HJB equation via game theoretic formulation. The equilibrium strategy and equilibrium value function are derived under smooth ambiguity. Finally, sensitivity analysis of equilibrium strategy is provided to demonstrate the effects of model parameters on the equilibrium strategy.

题目：Equilibrium investment strategy for a DC pension plan with the return of premiums clause and mispricing under imperfect information

报告人：王佩（广东金融学院）

摘要：This paper investigates a time-consistent investment strategy for a defined-contribution pension (DC) pension plan with the return of premiums clause and mispricing under the mean-variance criterion. During the accumulation phase, members of the DC pension plan contribute a fixed proportion of their stochastic salary as premiums, and the manager of the DC pension plan invests the premiums in a financial market to increase the pension size. The financial market contains a market index, a risk-free asset, and a pair of mispriced stocks, where the expected return rate of the stocks and mispricing follow mean-reverting stochastic processes, but the expected return rate of the stocks is not directly observable. Moreover, when the members die during the accumulation phase, they are allowed to withdraw their premiums accumulated at a predetermined interest rate, that is, a return of premiums clause is introduced. Under the framework of game theory, the explicit expressions of the equilibrium strategy and the corresponding equilibrium value function are derived. Finally, numerical examples are presented to illustrate our derived results. Some of our findings include: as the growth of the predetermined interest rate accumulated by the premiums, the proportion invested in the market index rises; for the same expected terminal wealth, the strengthened market liquidity significantly reduces the investment risk.

题目：Equilibrium multi-period investment strategy for a DC pension plan with incomplete information: hidden Markov model

报告人：卞利花 (徐州工程学院)

摘要：In the financial market with both observable and unobservable market state, this paper explores the equilibrium investment strategy for a DC pension plan with mean-variance criterion in a discrete-time setting. The dynamics of the partially observed market state is described by a discrete-time finite state hidden Markov chain. There is a riskless asset and a risky asset in the financial market, where the return rate of the risky asset depends both on the observable and unobservable market state. Meanwhile, the stochastic salary process is also modulated by the observable and unobservable market state. Under the framework of non-cooperative game, we firstly define the equilibrium investment strategy for the multiperiod mean-variance DC pension plan. By adopting sufficient statistics method, the investment problem for the mean-variance DC pension plan with incomplete information is transformed into the one with complete information. The closed-form equilibrium investment strategy is derived by solving the extended Bellman equation. Finally, numerical results show that the incomplete information has significant impacts on the equilibrium investment strategy and the equilibrium efficient frontier. Neglecting the reality of incomplete information in the financial market will reduce the investment benefit of the DC pension plan. The longer the investment horizon, the more investment benefit loss for the DC pension plan.

分组报告（十二）：信息披露，ESG 与风险管理
主持人：雷蕾（重庆大学）

题目： Method of moments estimation for stochastic volatility models

报告人：吴燕丰（复旦大学）

摘要： We develop moment estimators for the parameters of Heston-type stochastic volatility (SV) models. We first derive the explicit formulas for the moments and covariances of asset prices based on which our moment estimators can be developed. We then establish a central limit theorem for our estimators and derive the explicit formulas for the asymptotic covariance matrix. Finally, we provide numerical results to validate our method.

题目： Proactive Enforcement of Information Disclosure and Stock Price Synchronicity

报告人：郭世俊（重庆大学）

摘要： In the context of China's proactive disclosure enforcement regime, we examine the effect of publicly enforced mandatory disclosure on stock price synchronicity. Using an event study approach and difference-in-differences estimation, we find that stock price synchronicity significantly diminishes for firms in the focus-sector firms relative to the non-focus-sector firms after the enforcement of an industry-specific disclosure regulation. These results suggest that publicly enforced disclosure conveys firm-specific information in variation of stock price and provide efficient monitoring. We also find this negative association is more pronounced in firms with an absence of transparent information environment, in firms with weaker private enforcement, and in firms with higher proprietary costs. Moreover, we find that this negative association is mitigated through manager learning channel where non-focus-sector firm managers learn from the private information in stock price about focal firms' disclosure policy and incorporate this information in the corporate specific disclosure decisions.

题目： Generating Copula-Correlated Random Variables: A Sequential Acceptance-Rejection Method

报告人：戴伟民（复旦大学）

摘要： In this paper, we consider the problem of generating a random vector whose joint distribution are characterized by a copula function and their marginal distribution functions. We propose a sequential acceptance-rejection method, which avoids the inversion of both marginal distributions and conditional distributions of the copula function which are needed in traditional generation methods. In our method, we first generate samples based on the marginal distributions and then use an acceptance-rejection procedure to construct samples with desired dependence structure. The method is also applicable in generating time series random variables. We prove that the computational cost of our method only grows linearly with respect to their dimensionality for several types of copulas. Finally, we provide extensive numerical experiments which shows our method is quite efficient in comparison with traditional methods.

题目：The ESG Impacts of Capital Market Liberalization: Evidence from the Shanghai-Hong Kong Connect and the Shenzhen-Hong Kong Connect

报告人：冯丽璇（重庆大学）

摘要： We employ the Shanghai-Hong Kong Connect and the Shenzhen- Hong Kong Connect (hereafter, the Connects) as exogenous shocks to the liberalization of China's A-share stock market and study how the Connects shape Chinese firms' ESG policies. The staggered difference-in-differences (DiD) regression results show that the Connects significantly improve the ESG performance of firms investible to Hong Kong investors via the Connects (hereafter, eligible firms). This finding holds in a broad battery of robustness tests, including those addressing the concern about heterogeneous treatment effects with differential timing in staggered DiD estimators. Channel tests suggest that the Connects improves ESG by easing eligible firms' financing constraints and agency problems. Consistent with these tests, further analyses demonstrate that eligible firms' financing needs or governance mechanisms and Hong Kong investors' governance power moderate the Connects' ESG impacts.

分组报告（十三）：尾部风险管理
主持人：Ma Shumin（北京师范大学－香港浸会大学联合国际学院）

题目：Efficient forecast with copula-based regularized transfer learning

报告人：Ma Shumin (北京师范大学-香港浸会大学联合国际学院)

摘要：Tail risk emerges in the financial market when extreme events like COVID pandemic sweeps the world. It is challenging to conduct an accurate forecast under such market conditions. Traditional methods tackle the forecast problem by extracting the distribution characteristics from historical data under the assumption that the underlying data distribution keeps unchanged. However, ignoring the fact that the distributions are actually heterogeneous under different market conditions, these models can hardly achieve high-quality forecasts. In this work, we propose a tail-risk-proof forecast model based on the transfer learning theory. Specifically, we dive deep into the unique characteristics embedded in the financial data and put emphasis on the dependence shift under volatile market conditions. Experiments on HKEX stock returns and consumer credit dataset kindly provided by one leading E-commerce platform show that the improvements in the forecast accuracy are quite notable and robust compared to various benchmark models.

题目： Generative CVaR Portfolio Optimization with Attention-Powered Sequential Learning of Factor Models

报告人：严兴（中国人民大学）

摘要： The dynamic portfolio construction problem requires dynamic modeling of the joint distribution of multivariate stock returns. To achieve this, we propose a dynamic generative factor model which uses random variable transformation as an implicit way of distribution modeling and relies on the Attention-GRU network for the dynamic modeling. The proposed model captures the dynamic dependence among multivariate stock returns, especially focusing on the tail-side properties. We also propose a two-step iterative algorithm to train the model and then predict the time-varying model parameters (including the time-invariant tail parameters). At each time, we can easily simulate new samples from the learned generative model, and we further perform CVaR portfolio optimization with the simulated samples to form a dynamic portfolio strategy. The numerical experiment on stock data shows that our strategy using the proposed model leads to wiser investments that promise higher rewards while presenting lower tail risks and smaller maximum drawdowns.

题目： Nonlinearly weighted convex risk measures based on market regimes

报告人：卓俊晖（西安交通大学）

摘要： The construction of appropriate risk measures is the basis of risk control and portfolio selection, and an important issue worthy of attention is how to integrate the information of high-order moments in random returns, the investor's risk preference and the change in market macro conditions into the construction of new risk measures. Relying on the above ideas and the properties and constructions of current risk measures, we propose a class of market regime-based non-linearly weighted convex measures by combining the generalized convex risk measure with the market regime selection. Then, we demonstrate its theoretical properties and design a practical algorithm by using the idea of Markov chain. Through considering different collections of market regime sets, we empirically demonstrate that the new risk measure has better performance than current measures and can flexibly reflect the infulences of different market regime sets. Furthermore, we establish a corresponding portfolio selection model based on the new risk measure, and a series of empirical tests show the superior performance of the optimal portfolio got under the new risk measure with respect to typical performance ratios.

题目： On the Maximization of Long-Run Reward CVaR for Markov Decision Processes

报告人：余志辉（中山大学）

摘要： This paper studies the optimization of Markov decision processes (MDPs) from a risk-seeking perspective, where the risk is measured by conditional value-at-risk (CVaR). The objective is to find an optimal policy among history-dependent randomized policies to maximize the long-run CVaR of instantaneous rewards over an infinite horizon. By establishing two optimality inequalities of opposing directions, we prove that the maximum of long-run CVaR of MDPs over the set of history-dependent randomized policies can be found within the class of stationary randomized policies. Different from the optimality of deterministic policies in classical MDPs, we find that there may not exist an optimal stationary deterministic policy for maximizing CVaR. We further prove the existence of an optimal stationary randomized policy that requires randomizing over at most two actions. Via an alternative convex optimization representation of CVaR, we convert the long-run CVaR maximization MDP into a minimax problem, where we prove the interchangeability of minimum and maximum and the related existence of saddle point solutions. Furthermore, we propose an algorithm that finds the saddle point solution by solving two linear programs. These results are then extended to a general scenario of maximizing the mean and CVaR of rewards simultaneously. We also find that the long-run CVaR MDP is equivalent to the long-run average MDP when the probability level of CVaR is 0. Finally, we conduct numerical examples to demonstrate the main results.

题目： China's Peer-based IPO Valuation: The Efficiency of Market Versus Regulatory Pricing Regimes

报告人：王冠英（天津大学）

摘要： China U-turn regulation on 23 price-to-earnings cap hits initial public offering (IPO) market since 2014. This offers an ideal setting to make a comparative analysis of the market versus regulatory pricing regimes on pricing efficiency of peer multiples. Using hand-collected peers from IPO prospectuses, we find that regulatory-pricing IPOs are systematically undervalued by about 42% to 56.9% at the offer price relative to peers, and this undervaluation has a negative effect on postissuance returns, but there is no such undervaluation and negative effect for market-pricing ones. Portfolio tests show that a long-short portfolio constructed from firms with low-minus-high P/V ratios, for regulatory-pricing firms, gains 15.6% to 19.2% per annum, but for market-pricing firms, cannot earn riskless profits. We also identify competition and informativeness channels to explain the negative link of IPO valuation-postissuance returns. Our results remain robustness after addressing potential peer selection bias and price fairness.

题目： Option pricing under the TGARCH model with NHP jump

报告人：白逸洲（中国民航大学）

摘要： In this study, we consider option pricing under a threshold GARCH model with non-homogeneous Poisson jump (TGARCH-NHPJ). More specifically, we derive the risk neutral dynamics by using the stochastic discount factor and propose a lattice algorithm to price options in this framework. We also provide a method of parameter estimation in our TGARCH-NHPJ model setting using historical data on the underlying time series. By comparing the pricing results with GARCH model, TGARCH model, GARCH-jump model, we show that accommodating non-homogeneous Poisson jump effect and threshold substantially changes the option prices. The empirical results also show that the TGARCH-NHPJ model performs well in explaining option prices and confirm the importance of allowing for both nonhomogeneous Poisson jump components and threshold.

题目： A numerical study of the utility-indifference approach for pricing American options

报告人：阎冬（对外经济贸易大学）

摘要： Utility-indifference approach is a useful approach to be adopted for pricing financial derivatives in an incomplete market and is an ongoing hot research topic in quantitative finance. One interesting question associated with this approach is whether or not it renders to the same option prices, degenerately, when the market becomes infinitesimally close to a complete market. The answer for such a question has been provided for European-style options as there is a well-documented theoretical proof in Davis et al. (1993). However, a theoretical proof for the case of pricing American-style options is unavailable at this stage and the answer for this question must be at least numerically confirmed before it can be comfortably used to price American-style options in incomplete markets. The contribution of this paper is to provide such a numerical verification.

题目： 基于资产负债表的中国宏观金融风险研究

报告人：赵林海（华侨大学）

摘要： 当前我国宏观经济运行面临需求收缩、供给冲击和预期转弱"三重压力"，经济下行压力持续存在。这一宏观经济环境也使我国面临巨大的系统性风险。要守住不发生系统性风险的底线，我们必须准确分析宏观经济各部门之间的关联性和可能的风险传染路径，以考察金融风险在不同部门之间的传染机制。本文根据2000-2021年共22年的中国国家资产负债表数据，从存量和流量两方面对我国总体以及宏观经济五部门的金融运行情况进行分析，运用或有权益模型测算2020-2021年五部门的风险指标（违约距离和违约概率）并进一步考察宏观金融风险因子对风险指标的时变影响。为更进一步理清各部门之间的风险传染路径，我们构建了2008、2015和2020年的资产负债关联网络模型，采用网络分析方法研究风险传染，并引入传染乘数对我国宏观金融风险传染进行分析。

本文研究发现：第一，2002-2021年，我国经济快速发展，在"去杠杆"政策的实施下，各部门金融风险得到一定程度的缓解，但同时也积累了许多新的问题和风险，总体金融风险水平仍处于高位；第二，金融机构、非金融企业和国外部门的违约距离显著低于居民部门和政府部门，我国非金融企业、金融机构以及国外部门的债务风险相对较高，五部门的违约概率都非常小，除2008年和2020年，基本上都接近于零；第三，基于隐含资产价值的杠杆率增加，隐含资产波动率增大，违约距离降低，宏观金融风险增加，各部门的风险水平受隐含资产价值波动率的影响更大，隐含资产价值波动率增加，违约距离降低，部门金融风险增大；第四，在我国经济遭受重大不利冲击的年份，金融机构对居民部门、非金融企业、金融机构本身、政府部门和国外部门都会造成很大的负面影响，其传染乘数较大，近20年来，虽然我国经济金融体制发生了一定的变化，但各部门的传染效应从高到低的排序却未发生改变，依次为金融机构、国外部门、非金融企业、政府部门和居民部门。最后，本文根据上述研究结论提出防控宏观金融风险的政策建议。

分组报告（十五）：固定收益与信用风险管理
主持人：凌爱凡（上海外国语大学）

题目：债券募集说明书模糊信息对发行利差的影响

报告人：邓晴元（四川大学）

摘要：目前鲜有关于债券信息披露文件文本分析的研究文献。本文以 2009 年-2021 年所有公开发行的固定利率信用债券募集说明书为样本，研究了模糊信息对发行利差的影响。研究发现，债券募集说明书模糊信息会显著提高债券发行利差，不仅揭示了发债企业更高的财务风险，还揭示了更高的非财务风险。对于高度集权的企业，债券募集说明书模糊信息会增大投资者信息不对称程度，从而导致发行利差进一步上升。进一步的，社会信任作为一种非正式制度，能够缓解债券募集说明书模糊信息对发行利差的提升作用。对于国有企业，债券募集说明书模糊信息对发行利差的提升作用也更小；而对于违约风险高的企业，债券募集说明书模糊信息对发行利差的提升作用更大。此外，预期和未被预期的模糊语调都具有显著作用。最后，笔者发现基金持有债券具有"背书"效应，能缓解债券募集说明书模糊信息提升发行利差的作用，但是从持债倾向和持债比例看，基金投资者都不愿投资债券募集说明书模糊度高的债券。

题目：谁为"台风冲击"的损失买单：政府还是企业？－来自台风冲击下公司债利差的证据

报告人：李嘉豪（江西财经大学）

摘要：受气候变化的影响，近年来台风对沿海地区的影响越来越大，台风冲击对当地经济和人们生活造成巨大损失。那么谁在为台风冲击的损失买单？本文以公司债为研究对象，以台风冲击为准自然实验，讨论了台风冲击对沿海地区公司债利差的影响。实证研究发现，受到台风冲击的沿海地区公司债利差显著更高，该地区公司在债券融资成本更高，在台风等级越高，或距台风中心距离越小的地区，台风冲击对公司债利差的影响越大。机制分析表明，地方政府债券挤压和债券流动性风险上升，是导致受台风冲击地区债券利差升高的重要原因。本文的表明台风冲击造成的损失会转嫁给了当地企业，并以高的债券融资成本为代价。

题目：主权信用风险的自适应高维时变贝叶斯建模与时频域连通研究

报告人：郝立亚（宁波大学）

摘要：随着全球主要经济体公共债务压力的显著上升，主权信用分化明显，信用风险的跨区域传导也将产生更为持久的影响。本文基于主权信用风险的预期因子和溢价因子的视角构建了基于自适应时变 VAR-SV 的主权信用风险传染模型，实现了模型的完全贝叶斯估计。在此基础上，考虑时变系数和系统方差-协方差结构，将传染连通度分解为不同频段分量，从而实现了主权信用风险的时频域连通动态测度。研究发现，1）主权信用预期损失的总连通水平具有一定的时变波动性，高度依赖于信用风险相关事件的发生； 2）受特定国家经济发展基本面和市场流动性的驱动，各国在系统中的风险传导地位受到信用风险事件冲击的持续时间较长，表现为净传导方向或强度的改变；3）风险厌恶情绪的跨国家流动以中短期为主，中国和美国在全球信用风险传导体系中具有"情绪锚"的作用；4）在欧债危机和新冠疫情期间，中国均作为系统中的风险溢价净溢出国家，新冠疫情期间的净溢出强度更大，与中国不同，美国对信用体系的影响主要在中短期，长期所有减弱。本文的研究对完善信用风险预警机制，改进金融审慎监管提供了有益参考。

题目：Finite-time stability and optimal control for stochastic credit risk contagion model with sentiment

报告人：邵研（宁夏大学）

摘要：Counterparty sentiment and major uncertain factors always affect credit risk contagion in credit risk transfer (CRT) market. In order to effectively analyze credit risk contagion, this paper proposes a stochastic credit risk contagion model considering sentiments, in which the stochasticity is driven by Lévy process. Based on the Lyapunov function method, sufficient condition of finite-time stability is derived. The impacts of counterparty sentiment and Lévy process on credit risk contagion are analyzed. To effectively control credit risk contagion, the stochastic credit risk control model is established, and the optimal control strategy is given by using Pontryagin's maximum principle. Numerical simulating results show the correctness and effectiveness of the theory.

分组报告（十六）：供应链金融与金融优化 II
主持人：陈甜（对外经贸大学）

题目： 基于参保者收入异质性的养老金结构优化问题研究

报告人：王论意（中国人民大学）

摘要： 为了应对人口老龄化对现收现付制养老保险的冲击，我国大力发展个人养老金以保障参保人的养老效果。其中，税收优惠政策是提升个人养老金回报效率、实现个人养老金扩面的重要保障。不同收入群体适用的异质税率决定了其在参与个人养老金时所享受的税收优惠幅度存在差异，因而产生异质化的养老金回报效率和偏好顺序。本文将参保人的收入异质性纳入理论模型，建立起不同收入参保群体与政府决策的 Stackelberg 均衡，并依此求得社会基本 PAYGO 养老金、个人税延 EET 养老金和个人储蓄的最优配比。在基准模型中，中等和高收入群体倾向于顶格缴纳 EET 养老金，而低收入群体则选择部分缴纳 EET 养老金。同时，最优 PAYGO 缴费率和最优 EET 缴费限额的结果相较于当前的缴费制度实践具有 良好的校准效果。研究还发现：扩大中等收入群体规模，有助于增大社会总福利；提高 EET 的投资回报 率有助于实现个人养老金扩面；个人养老金的税收优惠措施可考虑从"提高缴费限额"和"降低领取税率"两个方面着手，在不增大政府财政负担的前提下，优化税收优惠模式。

题目： Social Comparison and Corporate Social Responsibility in Duopoly

报告人：孙玉哲 (中国人民大学)

摘要： We incorporate socially comparable (SC) and non-social-comparison (Non-SC) consumers in a duopolistic model with socially responsible corporate (CSR) and a profit-maximizing (PM) firm. In equilibrium, the CSR manager always commits responsibility to consumer surplus, and the extent of the firm's social responsibility increases with rising consumer comparison incentives. Although social comparison can harm consumers'surpluses and firms'profits, it always benefits social welfare, while corporate social responsibility can decrease social welfare. A unique incentive of social comparison exists such that the firm's optimal CSR strategy coincides with the optimal CSR degree for social welfare.

题目： 中国银行供应链金融业务模式研究

报告人：李晶（河北师范大学）

摘要： 近年来，中小企业"融资难、融资贵"的问题一直备受我国各级政府部门关心，金融机构通过发展供应链金融业务，可以在一定程度上解决中小企业融资难题。基于此，本文以中国银行供应链金融业务为研究对象，对其发展策略进行研究，不仅可以解决供应链中小企业融资难题，提升中小企业信贷资金的可得性，还可以扩展中国银行业务范围，提升银行的整体竞争力，在此基础上也可以对其他企业和银行开展供应链金融业务提供借鉴，加快供应链金融在我国的发展速度。首先，对相关概念和供应链金融业务的一般模式进行介绍。其次，本文借助宏观环境分析法、竞争环境分析法，对中国银行发展供应链金融业务的外部环境进行分析，并对内部环境进行了研究，借助 SWOT 分析法，对中国银行发展供应链金融业务的内外部优势和劣势进行综合分析。最后，本文从几个方面提出了中国银行发展供应链金融业务的对策建议，希望能够使得中国银行供应链金融业务的发展策略顺利开展。

题目： Liquidity Provision and Its Information Content in Decentralized Markets

报告人：陈甜（对外经济贸易大学）

摘要： This paper considers a liquidity provider who decides whether she should add liquidity to or remove liquidity from a liquidity pool on a decentralized exchange. We first provide analytical formulations of the expected fee income and impermanent loss of the liquidity provider. Using these results, we show that the liquidity provider adds liquidity to the pool if and only if the price volatility (or return) falls into a closed interval. The empirical study using transaction data from the WETH-USDC and USDT-USDC token pools on Uniswap validates the key theoretical findings and shows net liquidity provision has significant prediction power for volatility on daily and weekly time horizon.

题目： 不确定损失下企业网络安全防御决策的鲁棒优化研究

报告人：许豪（湖南工商大学）

摘要： 近年来，为了应对信息技术飞速发展带来的网络安全风险，不少企业开始尝试多元化安全防御策略，力求获取充分网络安全保障。本文针对集中式企业与非集中式企业网络安全防御目标与环境的现实差异，充分考虑网络风险的不确定性及外部性及预算约束，通过数据驱动的方式，基于高斯核密度构建不确定集合以描述网络安全风险损失的不确定性，并设置一定的算法对上述两种情形下的信息安全投资策略鲁棒优化模型进行求解。结果表明：相较于传统椭球、盒子不确定集，球型不确定集方式下对数据信息的识别更为全面，特别是在集中式情形下，财富效用提升更为明显，该方法为企业在损失不确定下制定信息投资策略提供了有效借鉴。另外，无论是非集中式企业还是集中式企业，均应结合自身保守程度，在预算 充足下积极参与信息安全投资；尤其是鉴于网络安全保险可有效降低网络风险波动对企业效用的负面影响，故企业在预算充足的条件下，均应选择全额保险。

题目：风险厌恶转变视角下货币政策的收入分配效应研究

报告人：林朝颖(福州大学)

摘要：居民风险厌恶作为一种主观心理因素，不仅是贫困心理陷阱循环往复的强化剂，也是人类社会向共同富裕迈进的重要障碍。现有文献主要关注货币政策的财富传导效应，对货币政策的心理传递机制关注不足。本文通过DSGE模型研究居民风险厌恶转变对货币政策收入分配机制的影响，并探讨了货币政策与财政政策在调控居民收入分配过程中内在协调配合机制，结果发现：风险厌恶的缓解改善了宽松货币政策对消费不平等与工资收入不平等的调控效应，但加剧了总收入不平等。税收政策与货币政策的组合有助于改善宽松货币政策所致的总收入不平等扩大问题，随着居民风险厌恶系数的下降，税收政策对货币政策调控效果的改善效应逐渐增强。在消费税、劳动税与资本利得税三类税收政策中，降低消费税与降低基准利率两类工具组合的调控效果最优。本文在理论上有助于厘清居民内在风险厌恶的转变对外在货币政策收入分配的影响机理，在实践上为"心理扶贫"与"政策扶贫"组合拳的制定提供决策参考依据。

题目：Optimal bailout strategy of systemic risk with cash injection constraint under lending and share cross-holding network

报告人：张子茜（西安交通大学）

摘要：This study focuses on the bailout of systemic risk. Under the net liability clearing mechanism, we investigate two bailout models under the one-layer lending network and two-layer lending and share cross-holding network, respectively. The bailout models aim at maximizing the payment of the financial system while minimizing the use of bailout budget. We initially introduce an upper bound constraint on bailout money in the models to save the government budget bailout. The two models are rewritten as 0-1 mixed integer programming problems, and we provide pre-processing rules to fix some 0-1 variables in order to enhance the efficiency of the final branch-and-bound type algorithms. Except case analyses under different network structures, we also carry out empirical studies on the Chinese banking market and give some helpful policy indications to the government, which demonstrate the effectiveness and practicality of our models and solution methods.

题目：宏观审慎政策预期管理效果评估

报告人：康志鑫（兴业证券股份有限公司）

摘要：研究双支柱框架下宏观审慎政策的预期管理是否具备良好的政策效果，应当遵循何种理论逻辑和传导机制，对我国进一步推进高水平对外开放、健全宏观金融监管框架、维护金融经济稳定具有重要的理论价值与实践意义。本文以跨境资本流动宏观审慎政策为例，首先通过汇率渠道、货币供给渠道和银行信贷渠道展开理论逻辑分析；其次综合考虑不同规则下的宏观审慎政策效果，选取相关目标变量、操作变量和监控变量进行实证检验；最后通过 TVP-SV-VAR 模型，进一步研究不同经济变量之间的时变影响关系，分析宏观审慎政策预期管理的传导机制。结果表明，社会公众对宏观经济变量的预期波动是金融不稳定因素的重要来源，宏观审慎政策可以通过引入预期管理机制有效提升政策效果，其中蕴含公众预期的前瞻型变量是关键影响要素。据此，本文提出以下政策建议：加强社会公众对宏观审慎政策的关注度与理解度，引导市场预期；加强预期管理，结合金融科技建立前瞻型风险预警指标和监测机制；加强政策协调，建立适应高水平对外开放要求的预期管理整体政策框架。

题目：Community analysis of US banking networks based on financial similarity

报告人：赵欣瑶（苏州大学）

摘要：During a period of ongoing interest rate hikes by the Federal Reserve, the United States encountered a surge in banking risks, leading to the collapse of several major financial institutions. We establish US banking networks based on financial similarities, spanning the period from the fourth quarter of 2021 to the first quarter of 2023. By employing both spectral clustering and the Louvain algorithm, we detect community structures among the top 100 banks in terms of assets for each quarter. Our research yields the following key findings: (i) We observe the emergence of three distinct communities within the banking network: healthy banks, those exhibiting extreme performance, and high-risk banks. Significantly, it is noteworthy that among the 100 banks, four banks that failed in 2023 were situated within the clusters of extreme-performance and high-risk banks. (ii) The initial interest rate hike triggered a noticeable increase in the number of high-risk banks. Furthermore, it catalyzed a clear differentiation among the various communities, resulting in a notably interconnected network. (iii) Despite the occurrence of three bank failures in the first quarter of 2023, the overall risk situation appeared to improve because banks strengthened their risk prevention and banks became more homogeneous. The insights garnered from our analysis not only identify vulnerable banks but also underscore the significance of risk management and its impact on the sector's stability.

题目： 破净溢出效应与系统性金融风险

报告人：杨璐（深圳大学）

摘要： 本文基于中国上市银行理财子公司的理财产品数据，结合 2022 年 11 月的理财产品大规模破净现象，研究了理财产品破净溢出效应对上市银行的系统性金融风险的影响。研究结果表明，理财产品破净溢出效应能够显著降低上市银行的系统性金融风险，但同时也显著增加整个金融体系的系统性金融风险。不同类型的理财产品，如固定收益类、中低风险和开放式理财产品对系统性金融风险的影响存在差异。金融传染或风险溢出效应并非破净溢出效应的主要驱动因素。因此，理财子公司作为银行网络的外围节点，能够有效分散银行风险，而理财产品的全面净值化能够快速识别、度量和释放底层资产风险，从而降低整个银行体系的系统性金融风险水平。这些发现对于进一步加强理财产品市场监管制度建设，提高系统 性金融风险防范能力具有重要意义。

分组报告（十八）：ESG、气候风险与碳风险 I
主持人： 马勇（湖南大学）

题目： Extreme Climate Risk Aligned: A Powerful Predictor of Equity Risk Premiums

报告人：马勇（湖南大学）

摘要： This paper develops a novel extreme climate risk index, which is extracted from a set of transformed climate risk measures via the partial least squares method. We find that this novel index significantly outperforms and complements the well-known economic variables, individual extreme climate risk proxies, and other competitors, both in- and out-of-sample, in predicting the U.S. equity market risk premium. Cross-sectionally, it also exhibits statistically and economically significant forecasting performance across various characteristic-based equity portfolios. The Campbell-Shiller-Vuolteenaho decomposition reveals that the cash flow channel is a primary economic source of the forecasting power. Besides, this new index captures information about aggregate market uncertainty and expected macroeconomic conditions.

题目： ESG评级不确定性和噪音对可持续投资的影响研究

报告人：罗德庆（湖北经济学院）

摘要： 本文将 ESG 评级噪音纳入资产定价模型，研究了风险资产的 ESG 不确定性与信号噪音对其均衡超额收益、投资者投资决策及福利的影响。研究发现，在绿色市场中，ESG 不确定性会增大风险资产超额收益，减小 ESG 敏感型投资者的风险资产投资比例，而在绿色中性市场中则刚好相反。ESG噪音则会降低绿色市场中风险资产超额收益，增加 ESG 敏感型投资者的风险资产投资比例，而在绿色中性市场中则刚好相反。当市场同时存在绿色资产和棕色资产时，ESG 的不确定性会增加绿色资产的均衡超额收益并降低 ESG 敏感型投资者对绿色资产的投资比例，但会降低棕色资产的均衡超额收益并增大 ESG 敏感型投资者的棕色资产投资比例。与之相反的是，ESG 噪音会降低绿色资产的均衡超额收益、增加 ESG 敏感投资者的投资比例，并增大棕色资产的均衡超额收益、减小 ESG 敏感投资者的棕色资产投资比例。本文从 ESG 不确定性与噪音的角度证实了统一 ESG 评价标准、规范 ESG评级机构的评级行为以达到减小 ESG 噪音目的的重要性，对国内绿色发展的相关研究形成有益补充。

题目： Climate Change, Policy Transformation, and Stock Market in China: Insights from Dynamic Return and Volatility Spillovers

报告人：欧阳海琴（江西师范大学）

摘要： This paper employs innovative TVP-VAR and DCC-GARCH models to quantify the return spillover and volatility spillover of climate risks, thereby examining the effects of climate change on China's stock market. The findings highlight the following key points: Firstly, there are three distinctive periods characterized by peak risk spillovers associated with climate uncertainty, occurring from 2010 to 2012, 2015 to 2016, and 2020 to 2022. Secondly, both physical risks and transition risks of climate change have long-term implications for the amplitude of return spillovers and short-term implications for volatility spillovers. Thirdly, different industries encounter varying shocks from climate risks. Energy-related sectors exhibit heightened sensitivity to physical risks, resulting in a positive impact. However, the agriculture, forestry, animal husbandry, fishery, and public utility sectors are found to be less sensitive to transition risks, which have a negative impact. Fourthly, in terms of the impact mechanism, income factors play a significant role in physical risks, whereas cost factors play a major role in transition risks. The specific transmission path for cost factors entails an increase in financial and administrative expenses due to climate change. Lastly, the paper puts forth targeted policy recommendations based on the conclusions drawn from the analysis.

题目：我国社保基金的碳足迹与碳风险暴露研究

报告人：周骐（华南理工大学）

摘要： 碳政策不确定性、碳价格波动等碳活动导致的碳风险已经蔓延到了证券市场。社保基金作为国家社会保障的储备基金，其重要性不言而喻。基于已有研究，本文运用中国社保基金在 2005 年-2021年期间的季度水平持仓数据，并结合公司水平的碳风险因子研究了中国社保基金的碳足迹与碳风险暴露水平。具体而言：首先，我们构建了碳风险对社保基金的双轮冲击模型，第一轮冲击来自碳风险对社保基金所持股票的价格的直接冲击，第二轮冲击基于基金所持股票的资产重叠效应，由于基金抛售行为再次对社保基金的资产带来损失。然后，我们研究了社保基金碳足迹与社保基金主动化管理水平、基金市场发展程度的关系。最后，我们分析了中国社保基金是否正通过资产配置剥离高碳风险股票，以减少碳风险敞口。研究发现，养老基金正在积极管理他们的股票投资组合，以减少碳足迹。基金主动化管理水平通过基金市场行业发展聚类程度来影响基金的碳足迹，而不是行业发展集中度。市场聚类程度越高，基金的主动化管理水平减碳的效果越好。本文的研究可以为社保基金的科学配置提供建议，为社保基金促进"双碳"目标的顺利完成提供政策建议。

分组报告（十九）：风险度量与风险管理
主持人：宋颖达（上海交通大学）

题目： Simulating the Confidence Interval for Conditional Value-at-Risk

报告人：张琨（中国人民大学）

摘要： Evaluation of portfolio loss often requires time-consuming simulation making the measurement of portfolio risk computationally challenging. ln this paper, we construct lower and upper bounds for a widely used risk measure, the so-called conditional Value-at-Risk(CVaR), by exploiting its structural properties. These bounds serve as useful complements to the plug-in estimates in the literature, by providing information on the magnitudes of their biases. By leveraging existing methods for approximating portfolio loss function, we propose efficient estimators for the proposed lower and upper bounds. Moreover, we establish two confidence intervals for the two bounds. Combine them leading to a confidence interval for CVaR. Numerical results suggest that this confidence interval works quite well.

题目： Estimating Systemic Risk within Financial Networks: A Two-Step Nonparametric Method

报告人：黄伟桓（南京大学）

摘要： CoVaR (conditional value-at-risk) is a crucial measure for assessing financial systemic risk, which is defined as a conditional quantile of a random variable, conditioned on other random variables reaching specific quantiles. It enables the measurement of risk associated with a particular node in financial networks, taking into account the simultaneous influence of risks associated with multiple correlated nodes. However, estimating CoVaR presents challenges due to the unobservability of its multivariate-quantiles condition. To address the challenges, we propose a two-step nonparametric estimation approach based on Monte-Carlo simulation data. In the first step, we estimate the unobservable multivariate-quantiles using order statistics. In the second step, we employ a kernel method to estimate the conditional quantile conditional on the order statistics. We establish the consistency and asymptotic normality of the two-step estimator, along with a bandwidth selection method. The results demonstrate that, under a mild restriction on the bandwidth, the estimation error arising from the first step can be ignored. Consequently, the asymptotic results depend solely on the estimation error of the second step, as if the multivariate-quantiles in the condition were observable. Numerical experiments demonstrate the favorable performance of the two-step estimator.

题目： Speed and Duration of Drawdown under General Markov Models

报告人：张功球（香港中文大学（深圳））

摘要： We propose an efficient computational method based on continuous-time Markov chain (CTMC) approximation to compute the distributions of the speed and duration of drawdown for general one-dimensional (1D) time-homogeneous Markov processes. We derive linear systems for the Laplace transforms of drawdown quantities and show how to solve them efficiently by recursion. In addition, we prove the convergence of our method and obtain a sharp estimate of the convergence rate under some assumptions. As applications, we consider pricing two financial options that provide protection against drawdown risk. Finally, we demonstrate the accuracy and efficiency of our method through extensive numerical experiments.

题目： Portfolio Selection with a Basket Credit-Linked Note

报告人：秦聪（苏州大学）

摘要： We consider a portfolio selection problem of a power utility investor who optimally allocates her wealth between a risk-free bond and a kth-to-default Credit-Linked Note (CLN), which contains both internal and external contagion risks. The value of the kth-to-default CLN and its dynamics are obtained under a Markov chain model. By dynamical programming principle, we characterize the value function as a unique classic solution to a system of Hamilton-Jacobi-Bellman equations, each of which associates with a default or shock realization state. Since an occurrence of a default or shock realization leads to a jump in the value of CLN and thereby a jump in the wealth process, the optimal strategy is to make the current marginal value of wealth equal the weighted average of risk-adjusted marginal value of wealth conditional on a default or shock realization, where the weight is determined jointly by the jump size and intensity of CLN. In particular, for a symmetric case where all reference entities have the same characteristics and the external contagion risk is absent, we prove that the optimal long/short strategy is uniquely determined by the sign of default risk premium. For the general case, our numerical analysis shows that compared to the 1st-to-default CLN, an additional default protection makes the investment in CLN more aggressive and generates about 19% more wealth when there are 10 reference entities. Finally, due to the non-separability of risk factors, we find that the interaction of contagion risks and multiple default protections can yield very complicated investment strategies.

题目： Optimal consumption and portfolio selection for retirees under inflation and pension default risk

报告人： Lin Zhenmei（西南财经大学）

摘要： The optimal investment-consumption analysis under insurer default risk and inflation risk for retirees who receive defined benefit pension payments is conducted. To enhance applicability, the minimum welfare guarantee and bequest motives are considered. Using the dynamic programming principle, we obtain the implicit solution of optimal consumption and investment strategies for retirees with a standard constant relative risk aversion utility. Certain implications consistent with financial advice are obtained by numerical analysis. As pension default risk increases, the rich prefer inflation-indexed bonds for hedging motive and the poor invest more in stocks for compensation motive. Despite of the presence of default risk, negative inflation risk premium leads to short positions in inflation-indexed bonds. The life portfolios of the rich tend to be more stable than those of the poor.

分组报告（二十）：动态投资组合
主持人：徐凤敏（西安交通大学）马贵元（西安交通大学）

题目： Intelligent Fund Recommendation with Dynamic Utility Learning

报告人：刘嘉（西安交通大学）

摘要： This talk introduces a fund recommendation system based on the epsilon-greedy algorithm and incremental learning framework. The model in this paper simulates the interaction process when customers browse the web pages of fund products. Customers will click preferred fund products when they visit the fund recommendation web page. The system will collect the customer's click sequences to estimate and update the utility function. The system generates a product list by the epsilon-greedy algorithm. Each product on the list has epsilon probability of being an exploitation strategy and epsilon probability of being an exploration strategy. We show the performance of estimation with different values of epsilon. This system has no requirement for historical data and achieves personalized recommendations.

题目： Dynamic trading with Markov liquidity

报告人：马贵元（西安交通大学）

摘要： In this paper, we solve a continuous-time portfolio choice problem of an investor under a Markov jump linear system that effectively captures stochasticity in asset returns, price impacts, and market resilience. Specifically, the investor chooses his portfolio to maximize the expected excess returns netting risks and trading costs due to the price impacts in a Markov switching market. We show that the value function and the optimal feedback trading strategy can be expressed in terms of the solution of a coupled matrix Riccati differential system. The presence of the market resilience and the Markov switching results in the coupled Riccati system being non-canonical. We manage to establish a set of transparent sufficient conditions to ensure the well-posedness of the coupled system. Our numerical results indicate that the investor trades more (less) aggressively in a liquidity regime where the temporary price impact is low (high) and permanent price impact is high (low) with low (high) market resilience.

题目： Green Portfolio Optimization under Uncertainty and Randomness

报告人：赵志华（西安电子科技大学）

摘要： In this paper, we examine a hybrid allocation benefit of green and non-green securities using a sparse bi-objective optimization with high-order moments in an uncertain and random market environment. We consider such an asset universe where green securities, listed relatively recently, lack sample information for modelling as uncertain variables, and the others have sufficient historical data for modelling as random variables. In this uncertain random environment, we propose a mean semi-absolute-deviation skewness portfolio optimization model with cardinality constraint. An efficient hybrid genetic algorithm is established as a solution methodology. Finally, we provide out-of-sample empirical analysis on the actual data sets from China Shanghai-Shenzhen stock market to illustrate the advantages of our hybrid allocation strategy.

题目： A multi-objective dynamic programming for ESG-integration investment strategy of TDFs

报告人：景奎（西安交通大学）

摘要： ESG (Environmental, Social, and Governance) factors have become pivotal in the investment landscape. An increasing number of pension funds now factor in ESG criteria when making investment decisions, necessitating further exploration of how to effectively integrate ESG considerations with other key metrics in long-term pension investments. This paper introduces a dynamic multi-objective model for analyzing the long-term investment strategy of Target Date Funds (TDFs), a crucial pension product. The model optimizes three core portfolio objectives: expected return, variance, and ESG score. It also accounts for dynamic variables such as human capital and inflation, which significantly impact long-term investment outcomes. To address the model's inherent time inconsistency, we employ an extended Bellman's principle to derive practical solutions. Additionally, a bipolar genetic algorithm is proposed to effectively manage the varying magnitudes among these objectives. Empirical experiments underscore the model's effectiveness and the proposed algorithm's superiority. The findings emphasize the viability of a long-term ESG integration strategy for TDFs, referred to as the ESG Integration Glide Path, which aligns evolving ESG objectives with the portfolio's risk and return characteristics. Furthermore, our research reveals that as human capital experiences exponential declines over time, it's advisable to reduce equity fund investments along the glide path. This adaptive approach ensures alignment with changing circumstances and potentially enhances financial performance. Lastly, an analysis of TDFs managers' preferences highlights the advantages of prioritizing ESG objectives, promoting responsible investing, and potentially improving risk-adjusted returns. Incorporating ESG considerations in long-term investment strategies is shown to be valuable for both ethical and financial reasons.

题目：基于期望分位数回归的函数型指数追踪模型研究

报告人：郑禹（西安工程大学）

摘要：In this research, stock index data are examined from a functional data perspective. The weight gained is also a curve when daily closing point data is swapped out for a daily curve, which can produce a more thorough and reliable result. A new algorithm is designed to find the optimal ff , minimum and optimal weight by setting ff as a variable. A novel functional least squares index tracking model and functional expectile index tracking model are established and defined. The functional expectile index tracking model is the best, according to the empirical findings and six robustness tests. The model in this study has greater tracking effect when compared to the outcomes. This idea and method are pioneering. In severe circumstances, it can effectively diversify the portfolio's tail risk and greatly enhance the portfolio's out-of-sample performance.

分组报告（二十一）：金融风险
主持人：张玲（广东金融学院）

题目： 中国金融机构系统重要性研究--基于QC-ISAM-ARMA带耦合时序网络

报告人：赵霞（上海对外经贸大学）

摘要： 考虑到金融机构间相依关系的非线性、周期性和时变性，本文基于分位相干系数、层间同构率和时间序列模型构建了一种全新的带耦合时序网络（简称：QC-ISAM-ARMA 带耦合时序网络），分周期、分市场情形下研究中国 30 家上市金融机构的系统重要性问题。新网络模型中引入的调节参数，表示节点自身动态演变与邻居节点的动态演变在整个系统内的相对重要性，有利于最优时序网络的选择。研究表明：本文构建的新网络在样本数据下具有更优的系统重要性识辨效果；中国金融机构在系统重要性上存在行业聚集现象，具有很强的时变性，且存在异质性周期特征，观测周期越长，金融机构系统重要性程度越强；银行机构在整个金融网络中的系统重要性显著强于证券机构与保险机构，保险机构的系统重要性主要受观测周期的影响，证券机构则主要受市场行情波动的影响；新冠疫情爆发前后，金融机构间的关联关系有显著的区别；市场稳定情形下本文的银行机构系统重要性结果与"2022 年中国系统重要性银行名单"存在相对较好的一致性，而在熊市或牛市下差别较大。本研究可以为金融机构系统重要性分析提供新的视角和借鉴，同时本文提出的新网络模型也适用于其他领域的个体间关联性分析。

题目： 基于 ESMD-CFastICA-BiLSTM-Attention 模型的系统性金融风险预测研究

报告人：欧阳资生（湖南师范大学）

摘要： 建立科学有效的系统性金融风险预警模型，对稳妥化解系统性金融风险和提升金融监管效率具有重要意义。在测度 47 家金融机构系统性金融风险和网络舆情指数基础上，围绕"分解–重构–集成"的思想，以极点对称经验模态分解（ESMD）、经验模态分解（EMD）、变分模态分解（VMD）、层次聚类、快速独立成分分析（FastICA）、注意力机制（Attention）和双向长短期记忆神经网络（BiLSTM）、支持向量机（SVM）及其组合模型，构建系统性金融风险预测模型。实证结果表明，在系统性金融风险预测前对相关 指标进行分解重构可以提升预测精度，本文提出的 ESMD-CFastICA-BiLSTM-Attention 的模型在系统性金融风险预警中最具优势。

题目： 考虑审计要素多重语义关联的财务欺诈识别研究

报告人：朱晓谦（中国科学院大学）

摘要： 现有的财务欺诈识别研究大多基于公司、审计师、会计师事务所等审计要素中较为简单的关系特征，罕有研究能够系统刻画各类审计要素之间错综复杂的关联关系。本文创新性地引入知识图谱（Knowledge Graph）技术，构建出包含公司、审计师和会计师事务所的多重语义关联网络，并利用图神经网络（Graph Neural Networks）方法捕捉知识图谱中审计要素之间复杂隐秘的关联关系以提高财务欺诈识别效果。基于我国2018 年-2019 年的上市公司样本，构建出包含12373个审计要素和 111194条关系的审计知识图谱。实证研究发现引入审计要素关联关系能够提升财务欺诈识别准确率；在多种审计要素关联关系中，考虑审计师对公司出具的审计意见对欺诈识别更为重要；对比不同历史时长的审计要素，使用公司历史 5 年的审计要素识别财务欺诈的效果更好。本研究可以为投资者、分析师以及监管机构在大数据时代下的财务欺诈识别提供科学参考。

题目： 地方政府债券对我国金融市场的尾部风险溢出研究——基于动态网络模型

报告人：郭艳红（南方科技大学）

摘要： 本文基于动态网络模型构建了以我国各个地方政府和上市金融机构为节点的尾部风险溢出网络，并根据此动态网络的变化进一步探索地方政府债券对我国金融市场的尾部风险溢出。具体来说，我们在Betz et al.（2016）的动态尾部风险传染网络构建体系的框架下，搜集各个地方政府债券指数、上市金融机构股价指数以及一些宏观变量，采用FARM-Selection方法解决了此网络构建中的高维回归问题。其次，我们将此网络进行可视化处理，并根据我国的一些相关政策和新闻事件对此网络进行分析。研究结果表明，地方政府债券对我国金融市场存在一定的尾部风险溢出，而我国的金融市场对地方政府债券也存在一定的尾部风险溢出；另外，我国政府发布的相关政策和新闻也会对此尾部风险传染网络产生冲击，包括网络的密度、中心度等；最后，我国的地理位置等因素也对此尾部风险溢出网络产生了重要的作用，具体表现为同一地区的上市商业银行与地方政府债券指数存在一定的风险溢出关系。这些实证发现对我国进一步防控地方政府债务风险与金融系统性风险均有重要的意义。

分组报告（二十二）：动态策略与金融市场
主持人：陈媛媛（南京大学）

题目： The Impact of Digital Transformation on Firm's Risk: Evidence from Chinese Listed Firms

报告人：李志成（西安电子科技大学）

摘要： Digital transformation, the process of incorporating digital technologies to enhance corporate products, services, and operations, has garnered substantial attention from policymakers and academics. Recent literature highlights the multifaceted effects of digital transformation, including its ability to alleviate information asymmetry, foster innovation, improve corporate performance, and reduce stock price crash risk. However, the effects of digital transformation on a firm's risks, especially systematic risk remain incompletely understood. This paper aims to bridge the gap by empirically examining the relationship between digital transformation and a firm's risk profile.

Drawing upon a comprehensive panel dataset encompassing 31,902 firm-year observations spanning from 2011 to 2021, we rigorously assess the influence of digital transformation on three distinct risk metrics: total, systemic, and idiosyncratic risk. Total risk encompasses stock price volatility and comprises two integral components—systemic risk, associated with a firm's co-movements to market fluctuations, and idiosyncratic risk, driven by firm-specific factors independent of market returns. By performing a two-way fixed effects model with clustered standard errors, we provide evidence that digital transformation reduces the total and idiosyncratic risk, while significantly increasing the firm's systematic risk. Mechanism analysis further indicates that digital transformation initiatives are often accompanied by heightened stock price synchronicity, particularly among firms exhibiting lower commitment to their transformation efforts. These findings reveal that firms' proactive response to the social call of digital transformation would lead to an increase in their systematic risk and stock price synchronicity.

题目： Extended Dynamic Programming Principle and Applications to Time-Inconsistent Control

题目： Dynamic Asset-Liability Management with Frictions

报告人：颜廷进（华东师范大学）

摘要： This work studies a dynamic asset-liability management problem of a company with market frictions. Specifically, the asset prices are modeled by a multivariate geometric Brownian motion with their excess returns driven by some correlated stochastic signals; and the liability process is modeled by another geometric Brownian motion correlated to the asset price dynamics. The company trades dynamically to offset the risks from its liability and each trade induces both temporary and persistent price impacts. We characterize the optimal trading strategies in terms of the solutions to the coupled matrix Riccati differential systems. Due to the price impacts, the company should adopt a target-chasing strategy in which the dynamic target portfolio is expressed in terms of the return-predicting signals and realized liability. We also derive some sufficient conditions, based on the model parameters alone, to ensure the well-posedness of the coupled Riccati systems. Our numerical results indicate that the temporary and persistent price impacts have opposite implications on the company's trading behavior. While the temporary price impact slows down the company's trading speed toward the target portfolio, the persistent price impact may encourage the company to trade more aggressively to enhance the expected returns.

题目： Attention Allocation on Factor Learning and Dynamic Portfolio Selection

报告人：孔令杰（上海财经大学）

摘要： We study the multi-period mean-variance portfolio selection problem under factor models, where the investors have the limited attention to conduct factor learning and decide which factor to learn in a given period. We derive the optimal attention allocation strategy and optimal portfolio selection strategy, and propose the numerical algorithm to obtain the strategies. Our empirical analysis shows that the attention allocation strategies are quite stable over different time periods. The investors tends to learn the market factor when the absolute value of HML factor is not too large, and the difference between MKT factor and SMB factor is not too large. The investors tend to learn the SMB factor the absolute value of HML factor is not too large, and the difference between MKT factor and SMB factor is large. While the investors only learn the HML factor when the absolute value of HML factor is large and the absolute value of MKT factor is small.

分组报告（二十三）：公司金融 II
主持人： 肖金利（厦门大学）

题目： 控股股东总会挤占员工收入份额吗？——来自金字塔层级公司的证据

报告人：肖金利（厦门大学）

摘要： 经济学家通常认为资本雇佣劳动，股东往往出于生产效率和利益最大化目标进行劳动雇佣及分配决策，现有文献却较少关注股东在决定公司劳动收入份额中的关键角色。本文利用 2008-2020 年沪深A股上市公司的数据，考察金字塔股权结构对公司劳动收入份额的影响，研究发现，金字塔层级越多，公司劳动收入份额越高。基于经营风险和经营收益两方面的机制检验证实了金字塔层级导致经营收益和破产成本不匹配，驱动公司利用劳动收入份额的经营杠杆作用，最大化潜在经营收益，让员工和债权人承担潜在破产成本。进一步研究发现，当企业的外部治理和内部治理更好、企业所在地人力资本更充足以及最低工资标准水平更低时，金字塔层级对劳动收入份额的影响越明显。本文从股权结构的视角拓展了探讨劳动收入份额影响因素的文献，也从就业和员工收入的视角发现了金字塔股权结构带来的潜在的社会效应，丰富了关于金字塔层级经济后果的研究结论，为深入理解劳动和资本的关系提供了新的证据。

题目： 土地财政压力与企业异地投资：基于 A 股上市公司的经验证据

报告人：刘新恒（长沙理工大学）

摘要： 本文整理了 2007–2017 年中国上市公司的子公司数据，以上市公司异地子公司比例来衡量企业的跨地区投资情况，实证研究了土地财政压力对企业异地投资的影响。结果表明：地方政府土地出让收入的减少会显著促使企业开展异地投资，其中地方政府策略性的税收征管和罚款强度的增加是土地财政压力导致企业跨地区投资的重要渠道，异质性检验发现，土地财政压力对企业异地投资的促进效应在地方官员晋升激励越大、政府竞争水平越高的地区以及非国有企业中更为明显。本文的研究有助于理解我国地方政府与企业行为之间的经济关系，建议深化地方财政体制改革，优化营商环境，以推动企业更高质量的发展。

题目： 文本信息特征与企业经营风险 ——基于企业决策的中介与调节效应

报告人：李国文（中央财经大学）

摘要：本文以 2012-2021 年我国 A 股上市公司的年度数据为样本，基于文本挖掘技术建立实证分析模型，研究文本信息特征与企业风险之间的关联机制。进一步的，本文针对文本特征的作用机制进行了研究。研究发现，在调节作用方面，文本净语调的下降、文本特异性的上升和文本可读性下降的会通过企业的融资约束增大来增高企业的经营风险；而文本净语调的上升还会通过企业的过度投资行为增多，增加企业经营风险。在中介作用方面，企业再多元化经营的情况下，年报文本可读性降低提高企业经营风险的作用削弱；管理层短视的条件下，年报文本特异性上升提高企业经营风险的作用增强；国有制企业中，年报文本可读性下降和特异性上升影响企业经营风险的作用削弱。本文的研究结论也为证监会市场监管提供了重要的预警信息，对市场和企业的健康发展起到指导作用。

分组报告（二十四）：金融衍生品
主持人：郑岩（海南大学）

题目： 全球风险厌恶对人民币汇率指数的异质性影响研究

报告人：郑岩（海南大学）

摘要： 深刻认识人民币汇率变化的影响因素对于我国管理汇率风险以及推进人民币国际化非常重要。在此背景下，本文利用分位数回归调查了全球风险厌恶对我国人民币汇率指数的影响。考虑到我国新推出的原油期货以人民币定价，我们进一步调查了我国原油期货在全球风险厌恶和人民币汇率关系中的作用。基于新提出的风险厌恶指数，我们发现全球风险厌恶对人民币汇率有异质性影响，其在低分位数下表现为显著的负向影响，而在高分位数下表现为显著的正向影响。这些结果在控制全球经济和金融不确定性影响后仍然稳健。另外，我们还发现我国原油期货价格能调节全球风险厌恶和人民币汇率的关系，具体表现为在低位数下增强全球风险厌恶对人民币汇率的负向影响。

题目： Beyond Forward-Looking Approach: Enhancing Market Timing with Option-Implied Probability Weighting

报告人：彭绍聪（华东师范大学）

摘要： Utilizing forward-looking information from option markets to enhance asset allocation performance has been widely adopted. However, conventional approaches have often overlooked investors' behavior bias, specifically concerning probability weighting, while focusing on risk aversion characteristics. This paper addresses this limitation by extracting the risk-neutral distribution of stock returns from the options market and introducing a subjective probability distribution through a pricing kernel with an additional probability weighting term. Our study reveals that option-implied distributions with probability weighting outperform conventional approaches across various evaluation metrics, particularly during market downturns. These findings underscore the significance of incorporating the time-varying probability weighting feature when utilizing option information for asset allocation.

题目： 基于多维信息的黄金期货价格短期预测及交易策略研究

报告人： 孙景云（兰州财经大学）

摘要： 本文利用多维度信息和机器学习方法建立黄金期货价格的短期预测模型，并根据预测结果构建交易策略。首先采用弹性网络模型对影响黄金期货价格的多维度信息进行特征筛选，利用相空间重构法和时差相关分析法分别确定预测模型中黄金期货自身及筛选变量的滞后阶数。其次，分别利用基于粒子群优化（PSO）和灰狼优化（GWO）算法的 BP、ELM 神经网络及 LSSVR 模型对黄金期货的日收盘价进行滑动窗口预测，发现 GWO-ELM 模型具有良好的预测性能和鲁棒性。为进一步提高该模型的方向预测精度，对模型中的适应度函数进行更改，实证结果表明改进后的模型获得更高的方向预测精度。最后，根据一步预测结果设计了 2 种交易策略，根据多步预测结果设计了 4 种交易策略并分别进行样本外回测，利用年化收益率、最大回撤、夏普比率等指标对不同交易策略的回测效果进行了对比分析。

分组报告（二十五）：ESG、气候风险与碳风险 II
主持人：汪先珍（上海纽约大学）

题目： 碳风险与银行贷款风险：机制与对策

报告人：邓翔（中南财经政法大学）

摘要： 本文运用2012-2021年我国240家商业银行的非平衡面板数据，创新性构建碳风险测度指标体系，运用双重固定效应模型实证检验了碳风险对银行贷款风险的影响，从贷款规模视角和银行贷款行业集中度视角考察其作用机制，并据此提出对策建议。研究结果显示：第一，碳风险显著增大了银行不良贷款率，提高了银行贷款风险。第二，碳风险通过增大银行投向采矿业、制造业和建筑业的贷款规模，进而增大银行贷款风险。而当银行贷款投向电力、热力、燃气及水生产和供应业以及交通运输、仓储和邮政业时，碳风险对银行贷款风险没有显著影响。第三，碳风险通过增大地方性商业银行的贷款行业集中度，进而增大银行贷款风险。而碳风险对国有和股份制商业银行的贷款风险没有显著影响。因此，提升商业银行的碳风险意识，扩大银行贷款客群，调整银行贷款结构，建立全面的碳风险管理体系，稳妥有序退出高碳市场，有助于加快我国绿色低碳转型进程。

题目： A股投资者关心气候风险吗？——来自期权市场的证据

报告人：汪先珍（上海纽约大学）

摘要： 实现"双碳"目标需坚持的原则之一是有效应对气候风险。本文基于上证50ETF期权市场的交易数据，探讨了A股投资者是否对气候风险做出了合理应对。研究发现，随着气候风险的上升，期权隐含的标的资产收益率呈更显著的左偏特征，价外看跌/涨期权的隐含波动率之比增加；不过，投资者并未对更大的气候风险予以更高的保护溢价，反而在交易中展现出更多的博彩偏好。进一步地分析显示，在极端天气情境下，（机构）投资者的应对趋于理性，即愿意为气候风险的上升付出更高的保护成本，并减少/增加价外看涨/跌期权的买入。综上表明，A股投资者虽然能够认识到气候变化将带来尾部风险，但是通过期权市场进行对冲保护的动机不足，且表现出明显的投机倾向，尤其是个人投资者。

题目：气候风险对农业企业债务期限结构的影响研究

报告人：方焕颖（华南理工大学）

摘要：气候风险是农业生产运作的主要风险因素，然而，探究气候风险的经济影响研究中往往较少考虑微观企业层面的影响机制，尤其在企业债务融资方面。本文基于目前我国农业企业债务短期化的普遍现状，并结合历史研究，考虑气候风险对农业企业债务期限结构的作用及影响机制。研究结果表明在短期内，相较于气候转型风险，物理风险仍为农业企业债务风险的关键因素，物理风险显著加剧农业企业债务短期化，该效应主要由高温、干旱灾害所引起。机制分析探讨了与债务期限结构有关理论在中国农业企业样本中的有效性，发现物理风险恶化农业企业融资环境、使企业资产期限短期化，从而加剧债务短期化。异质性分析表明农业企业产权属性，所在地区金融支持水平以及农业现代化水平在物理风险的影响效应中发挥着调节作用。本研究为气候风险条件下的农业企业在债务融资管理提供了决策依据。

交通信息

1. 福州长乐国际机场 → 福建省西湖宾馆

公交地铁：步行 38 米 → 空港快线长乐机场站公交站（闽运汽车北站线）→ 乘坐 1 站，到达火车站北广场站下车→步行 434 米，到达 1 号线地铁站 B 口→乘坐 1 号线地铁（三江口方向）→屏山 B 口出站→步行 854 米，到达福建省西湖宾馆；预计用时：1 小时 30 分钟，票价 33 元

机场打车：预计 56 分钟，价格 123 元左右

2. 火车站 → 福建省西湖宾馆

地铁：地铁 1 号线（往三江口方向）→ 屏山 B 口出站→步行 854 米，到达福建省西湖宾馆；预计用时：22 分钟，2 元

火车站打车：预计 18 分钟，15 元左右

3. 火车南站 → 福建省西湖宾馆

地铁：步行 737 米（11 分钟）→地铁 1 号线（往象峰方向）→ 屏山 B 口出站→步行 854 米，到达福建省西湖宾馆；预计用时：57 分钟，5 元

火车南站打车：32 分钟，56 元左右

福建省西湖宾馆、西湖酒店和福建会堂位置信息：

天气指引

天气预报：

1.11 月 3 日：晴转多云，最高温度 29°，最低温度 19°，东南风一级，空气优

2.11 月 4 日：多云，最高温度 30°，最低温度 21°，西风一级，空气优

3.11 月 5 日：中雨转多云，最高温度 27°，最低温度 15°，东南风一级，空气优

周五	周六	周日
11/03	11/04	11/05
☀️	⛅	🌧️ 85%
晴	多云	小雨
29℃	30℃	27℃
20℃	21℃	17℃
多云	多云	晴
东北风 1级	东北风 2级	西北风 1级
优	优	优